

INSTALLER: THESE INSTRUCTIONS MUST BE CONVEYED TO AND REMAIN WITH THE HOMEOWNER.

CERTIFIED UNDER CANADIAN AND AMERICAN NATIONAL STANDARDS, CSA 2.33, ANSI Z21.88 FOR VENTED GAS FIREPLACE HEATERS



QUALITY FIREPLACES
GAS FIRED - DIRECT VENT MILLIVOLT SYSTEM
INSTALLATION AND OPERATION INSTRUCTIONS FOR
MULTI-VIEW DECORATIVE FIREPLACE

NATURAL GAS MODEL **BGD40-N**
PROPANE GAS MODEL **BGD40-P**

CERTIFIED FOR CANADA AND UNITED STATES USING ANSI / CSA METHODS

WARNING: If the information in these instructions is not followed exactly, a fire or explosion may result causing property damage, personal injury or death.

FOR YOUR SAFETY

Do not store or use gasoline or other flammable vapours and liquids in the vicinity of this or any other appliance.

WHAT TO DO IF YOU SMELL GAS:

- Do not try to light any appliance.
- Do not touch any electrical switch.
- Do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

Installation and service must be performed by a qualified installer, service agency or the gas supplier.



Wolf Steel Ltd., 24 Napoleon Rd., Barrie, ON L4M 4Y8 Canada • (705)721-1212 • fax(705)722-6031
www.napoleonfireplaces.com • ask@napoleon.on.ca

W415-0299/C/03.12.03

TABLE of CONTENTS

Pg 3-5	INTRODUCTION Warranty General Instructions General Information Care of Glass & Plated Parts Dimensions				Vertical Venting Installation Flexible Vent Components Fireplace Vent Connection Rigid Vent Components Gas Supply Connection
6-13	VENTING Vent Lengths Air Terminal Installation Venting Application Flow Chart Typical / Special Vent Installations Venting Options	22-25	FINISHING Mantle Height Locations Log Placement Logo Placement Louvre Installation Door & Louvre Installation End Door Installation		
14-15	PENINSULA INSTALLATION PROCEDURE Framing Bar / Countertop Installation Brick Panel Installation Facing	26	OPTIONAL BLOWER INSTALLATION		
16	OPEN END INSTALLATION PROCEDURE Framing Brick Panel Installation Facing	27	OPERATION / MAINTENANCE Operating Instructions Maintenance		
17	SEE-THRU INSTALLATION PROCEDURE Framing Brick Panel Installation Facing	28	ADJUSTMENTS Pilot Burner Adjustment Venturi Adjustments Restricting Vertical Vents		
18	VENT FRAMING DIMENSIONS	29-30	REPLACEMENTS Ordering Replacement Parts Replacement Parts Vent Kits Terminal Kits		
19-22	VENTING SPECIFICS Wall and Ceiling Protection Horizontal Venting Installation	31	ACCESSORIES		
		32-33	TROUBLE SHOOTING GUIDE		

PLEASE RETAIN THIS MANUAL FOR FUTURE REFERENCE

WARNING

- Do not burn wood or other materials in this fireplace.
- Adults and especially children should be alerted to the hazards of high surface temperatures and should stay away to avoid burns or clothing ignition. Supervise young children when they are in the same room as the fireplace.
- Due to high temperatures, the fireplace should be located out of traffic and away from furniture and draperies.
- Clothing or other flammable material should not be placed on or near the fireplace.
- Any safety screen or guard removed for servicing must be replaced prior to operating the fireplace.
- It is imperative that the control compartments, burners and circulating blower and its passageway in the fireplace and venting system are kept clean. The fireplace and its venting system should be inspected before use and at least annually by a qualified service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, etc. The fireplace area must be kept clear and free from combustible materials, gasoline and other flammable vapours and liquids.
- Under no circumstances should this fireplace be modified.
- This fireplace must not be connected to a chimney flue pipe serving a separate solid fuel burning appliance.
- Do not use this fireplace if any part has been under water. Immediately call a qualified service technician to inspect the fireplace and to replace any part of the control system and any gas control which has been under water.
- Do not operate the fireplace with the glass door removed, cracked or broken. Replacement of the glass should be done by a licensed or qualified service person.
- Do not strike or slam shut the fireplace glass door.
- This fireplace uses and requires a fast acting thermocouple. Replace only with a fast acting thermocouple supplied by Wolf Steel Ltd.

NAPOLÉON gas fireplaces are manufactured under the strict Standard of the world recognized ISO 9001 : 2000 Quality Assurance Certificate.

NAPOLÉON products are designed with superior components and materials, assembled by trained craftsmen who take great pride in their work. The burner and valve assembly are leak and test-fired at a quality test station. The complete fireplace is thoroughly inspected by a qualified technician before packaging to ensure that you, the customer, receives the quality product that you expect from NAPOLÉON.

NAPOLÉON GAS FIREPLACE PRESIDENT'S LIFETIME LIMITED WARRANTY

The following materials and workmanship in your new NAPOLÉON gas fireplace are warranted against defects for as long as you own the fireplace. This covers: combustion chamber, heat exchanger, stainless steel burner, phazer™ logs and embers, ceramic glass (thermal breakage only), gold plated parts against tarnishing, porcelainized enamelled components and aluminum extrusion trims.

Electrical (110V and millivolt) components and wearable parts such as blowers, gas valves, thermal switch, switches, wiring, remote controls, ignitor, gasketing, and pilot assembly are covered and NAPOLÉON will provide replacement parts free of charge during the first year of the limited warranty.

Labour related to warranty repair is covered free of charge during the first year. Repair work, however, requires the prior approval of an authorized company official. Labour costs to the account of NAPOLÉON are based on a predetermined rate schedule and any repair work must be done through an authorized NAPOLÉON dealer.

CONDITIONS AND LIMITATIONS

NAPOLÉON warrants its products against manufacturing defects to the original purchaser only -- i.e., the individual or legal entity (registered customer) whose name appears on the warranty registration card filed with NAPOLÉON -- provided that the purchase was made through an authorized NAPOLÉON dealer and is subject to the following conditions and limitations:

This factory warranty is nontransferable and may not be extended whatsoever by any of our representatives.

The gas fireplace must be installed by a licenced, authorized service technician or contractor. Installation must be done in accordance with the installation instructions included with the product and all local and national building and fire codes.

This limited warranty does not cover damages caused by misuse, lack of maintenance, accident, alterations, abuse or neglect and parts installed from other manufacturers will nullify this warranty.

This limited warranty further does not cover any scratches, dents, corrosion or discolouring caused by excessive heat, abrasive and chemical cleaners nor chipping on porcelain enamel parts, mechanical breakage of PHAZER™ logs and embers, nor any venting components used in the installation of the fireplace.

NAPOLÉON warrants its stainless steel burners against defects in workmanship and material for life, subject to the following conditions: During the first 10 years NAPOLÉON will replace or repair the defective parts at our option free of charge. From 10 years to life, NAPOLÉON will provide replacement burners at 50% of the current retail price.

In the first year only, this warranty extends to the repair or replacement of warranted parts which are defective in material or workmanship provided that the product has been operated in accordance with the operation instructions and under normal conditions.

After the first year, with respect to this President's Limited Lifetime Warranty, NAPOLÉON may, at its discretion, fully discharge all obligations with respect to this warranty by refunding to the original warranted purchaser the wholesale price of any warranted but defective part(s).

After the first year, NAPOLÉON will not be responsible for installation, labour or any other costs or expenses related to the reinstallation of a warranted part, and such expenses are not covered by this warranty.

Notwithstanding any provisions contained in this President's Limited Lifetime Warranty, NAPOLÉON'S responsibility under this warranty is defined as above and it shall not in any event extend to any incidental, consequential or indirect damages.

This warranty defines the obligations and liability of NAPOLÉON with respect to the NAPOLÉON gas fireplace and any other warranties expressed or implied with respect to this product, its components or accessories are excluded.

NAPOLÉON neither assumes, nor authorizes any third party to assume, on its behalf, any other liabilities with respect to the sale of this product. NAPOLÉON will not be responsible for: over-firing, downdrafts, spillage caused by environmental conditions such as rooftops, buildings, nearby trees, hills, mountains, inadequate vents or ventilation, excessive venting configurations, insufficient makeup air, or negative air pressures which may or may not be caused by mechanical systems such as exhaust fans, furnaces, clothes dryers, etc.

Any damages to fireplace, combustion chamber, heat exchanger, brass trim or other component due to water, weather damage, long periods of dampness, condensation, damaging chemicals or cleaners will not be the responsibility of NAPOLÉON.

The bill of sale or copy will be required together with a serial number and a model number when making any warranty claims from your authorized dealer. The warranty registration card must be returned within fourteen days to register the warranty.

NAPOLÉON reserves the right to have its representative inspect any product or part thereof prior to honouring any warranty claim.

INTRODUCTION

GENERAL INSTRUCTIONS

THIS GAS FIREPLACE SHOULD BE INSTALLED AND SERVICED BY A QUALIFIED INSTALLER to conform with local codes. Installation practices vary from region to region and it is important to know the specifics that apply to your area,

for example: in Massachusetts State:

- The fireplace damper must be removed or welded in the open position prior to installation of a fireplace insert or gas log.
- The appliance off valve must be a "T" handle gas cock.
- The flexible connector must not be longer than 36 inches.
- The appliance is not approved for installation in a bedroom or bathroom unless the unit is a direct vent sealed combustion product.
- **WARNING:** This product must be installed by a licensed plumber or gas fitter when installed within the commonwealth of Massachusetts.

In absence of local codes, install to the current CAN/CGA - B149 Installation Code in Canada or to the National Fuel Gas Code, ANSI Z223.1, and NFPA 54 in the United States. Mobile home installation must conform with local codes. In the absence of local codes, install to the current standard for gas equipped mobile housing CAN/CSA Z240 MH Series in Canada or the manufactured home construction and safety standard, Title 24 CFR, part 3280, or the Fire Safety Criteria for manufactured home installations, Sites and Community Standard ANSI/NFPA 50IA in the United States.

Purge all gas lines with the glass door of the fireplace open. Assure that a continuous gas flow is at the burner before closing the door.

Under extreme vent configurations, allow several minutes (5-15) for the flame to stabilize after ignition.

The fireplace and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig (3.5 kPa). The fireplace must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig (3.5 kPa).

When the fireplace is installed directly on carpeting, vinyl tile or other combustible material other than wood flooring, the fireplace shall be installed on a metal or wood panel extending the full width and depth.

If the optional heat circulating blower is installed, the blower must be electrically connected and grounded in accordance with local codes. In the absence of local codes, use the current CSA C22.1 CANADIAN ELECTRICAL CODE in Canada or the ANSI/NFPA 70 NATIONAL ELECTRICAL CODE in the United States.

Minimum clearance to combustible construction from fireplace and vent surfaces:

sides, back, bottom, and top	0 inches
vent pipe	1 inch
recessed depth (corner installation)	25/4 inches

GENERAL INFORMATION

FOR YOUR SATISFACTION, ALL BURNER ASSEMBLIES HAVE BEEN TEST-FIRED TO ASSURE THEIR OPERATIONS AND QUALITY! Maximum input is 30,000 BTU/h for natural gas and propane. When the fireplace is installed at elevations above 4,500ft, and in the absence of specific recommendations from the local authority having jurisdiction, the certified high altitude input rating shall be reduced at the rate of 4% for each additional 1,000ft. Maximum output for natural gas is 20,400 BTU/hr at an efficiency of 68% with the fan on.

Minimum inlet gas supply pressure is 4.5 inches water column for natural gas and 11 inches water column for propane. Maximum inlet gas pressure is 7 inches water column for natural gas and 13 inches water column for propane. Manifold pressure under flow conditions is 3.5 inches water column for natural gas and 10 inches water column for propane.

This fireplace is approved for bathroom, bedroom and bed-sitting room installations and is suitable for mobile home installation

NO EXTERNAL ELECTRICITY (110 VOLTS OR 24 VOLTS) IS REQUIRED FOR THE GAS SYSTEM OPERATION. Expansion / contraction noises during heating up and cooling down cycles are normal and are to be expected.

If utilizing one of Wolf Steel's trim or surround kits, follow the framing instructions on page 14 and the finishing instructions on page 23, for removal of the top extension.

CARE OF GLASS, AND PLATED PARTS

Do not use abrasive cleaners to clean these parts. Buff lightly with a clean dry cloth. The glass is 3/16" tempered glass available from your Napoleon / Wolf Steel Ltd. dealer.

Do not substitute materials.

If the door glass should crack or break, do not operate the fireplace. Replace only with a door assembly certified with the fireplace. See **DOOR, LOUVRE AND TRIM INSTALLATION** for removal and replacement details. Clean the glass after the first 10 hours of operation with a recommended gas fireplace glass cleaner. Thereafter clean as required.

Do not clean glass when hot!

If the glass is not kept clean permanent discoloration and / or blemishes may result.

Provide adequate ventilation air. Provide adequate accessibility clearance for servicing and operating the fireplace. Never obstruct the front opening of the fireplace.

For safe and proper operation of the fireplace follow the venting instruction exactly.

Deviation from the minimum vertical vent length can create difficulty in burner start-up and/or carboning. Provide a means for visually checking the vent connection to the fireplace after the fireplace is installed. In order to avoid the possibility of exposed insulation or vapour barrier coming in contact with the fireplace body, it is recommended that the walls of the fireplace enclosure be "finished" (ie: drywall/sheetrock), as you would finish any other outside wall of a home. This will ensure that clearance to combustibles is maintained within the cavity.

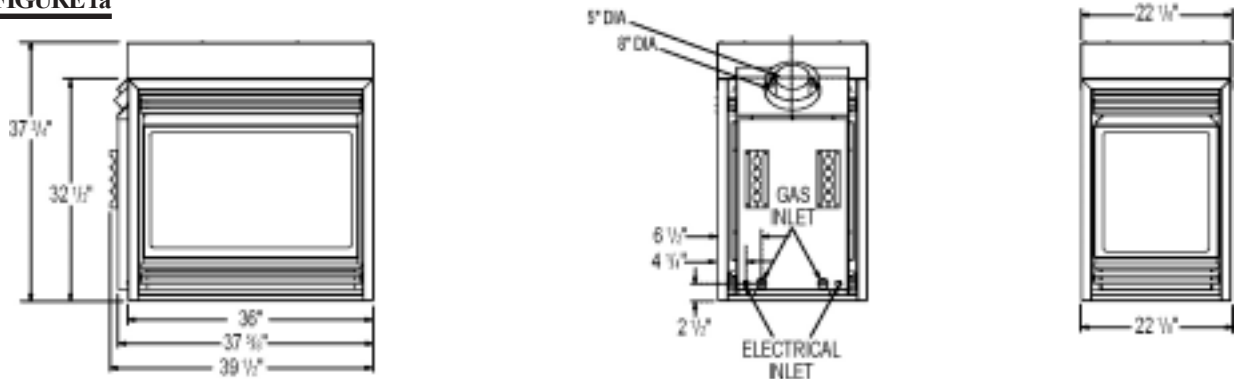
Vent lengths that pass through unheated spaces (attics, garages, crawl spaces) should be insulated with the insulation wrapped in a protective sleeve to minimize condensation.

Objects placed in front of the fireplace must be kept a minimum of 48" away from the glass front faces of the unit.

DIMENSIONS

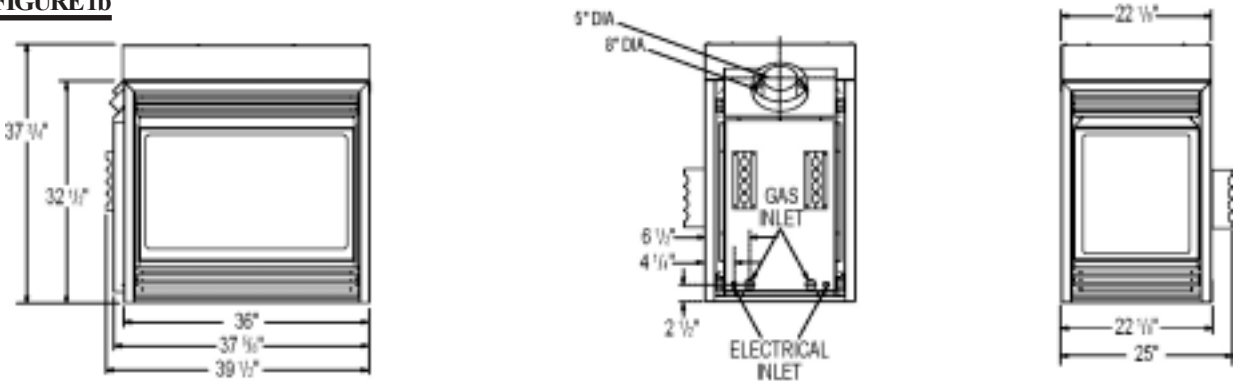
PENINSULA

FIGURE 1a



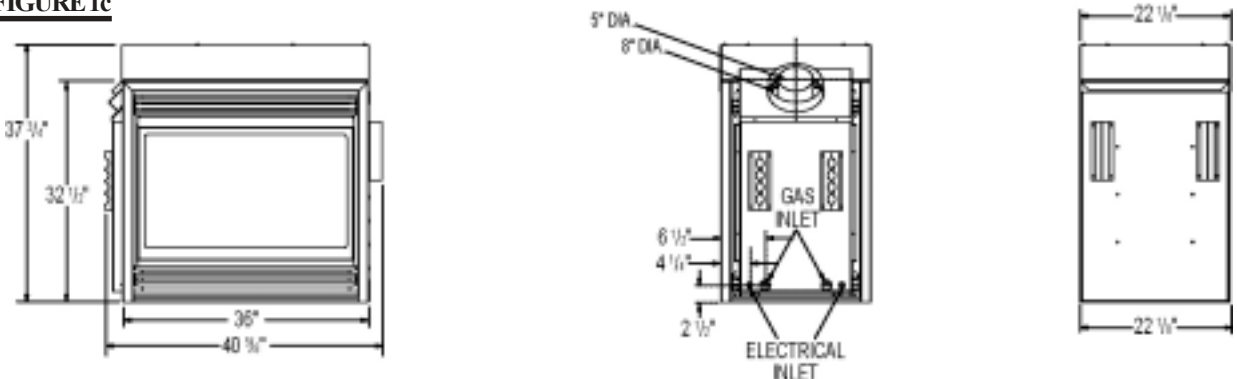
OPEN-END

FIGURE 1b



SEE-THRU

FIGURE 1c



VENTING

VENTING LENGTHS

Use only Wolf Steel or Simpson Dura-Vent Model DV-GS venting components. Minimum and maximum vent lengths, for both horizontal and vertical installations, and air terminal locations for either system are set out in this manual and must be adhered to. For Simpson Dura-Vent, follow the installation procedure provided with the venting components.

When using Wolf Steel venting components, use only approved Wolf Steel rigid / flexible components with the following termination kits: WALL TERMINAL KIT **GD422**, or 1/12 TO 7/12 PITCH ROOF TERMINAL KIT **GD410**, 8/12 TO 12/12 ROOF TERMINAL KIT **GD411**, FLAT ROOF TERMINAL KIT **GD412** or PERISCOPE KIT **GD401** (for wall penetration below grade). With flexible venting, in conjunction with the various terminations, use either the 5 foot vent kit **GD420** or the 10 foot vent kit **GD430**.

Wolf Steel rigid and flexible venting systems must not be combined.

Wolf Steel and Simpson Dura-Vent venting systems must not be combined.

These vent kits allow for either horizontal or vertical venting of the fireplace. The maximum allowable horizontal run is 20 feet. The maximum allowable vertical vent length is 40 feet. The maximum number of 5" vent connections is two horizontally or three vertically (excluding the fireplace and the air terminal connections) when using aluminum flexible venting.

For optimum flame appearance and fireplace performance, keep the vent length and number of elbows to a minimum.

The air terminal must remain unobstructed at all times. Examine the air terminal at least once a year to verify that it is unobstructed and undamaged.

Purge all gas lines with the glass door of the fireplace open. Assure that a continuous gas flow is at the burner before closing the door.

Under extreme vent configurations, allow several minutes (5-15) for the flame to stabilize after ignition.

Nine (9") inches is the minimum bend radius allowed for the 8" diameter flexible liner.

For optimum performance it is recommended that all horizontal runs have a 1 inch rise per foot when using Napoleon flexible vent components.

A terminal shall not terminate directly above a sidewalk or paved driveway which is located between two single family dwellings and serves both dwellings. Local codes or regulations may require different clearances.

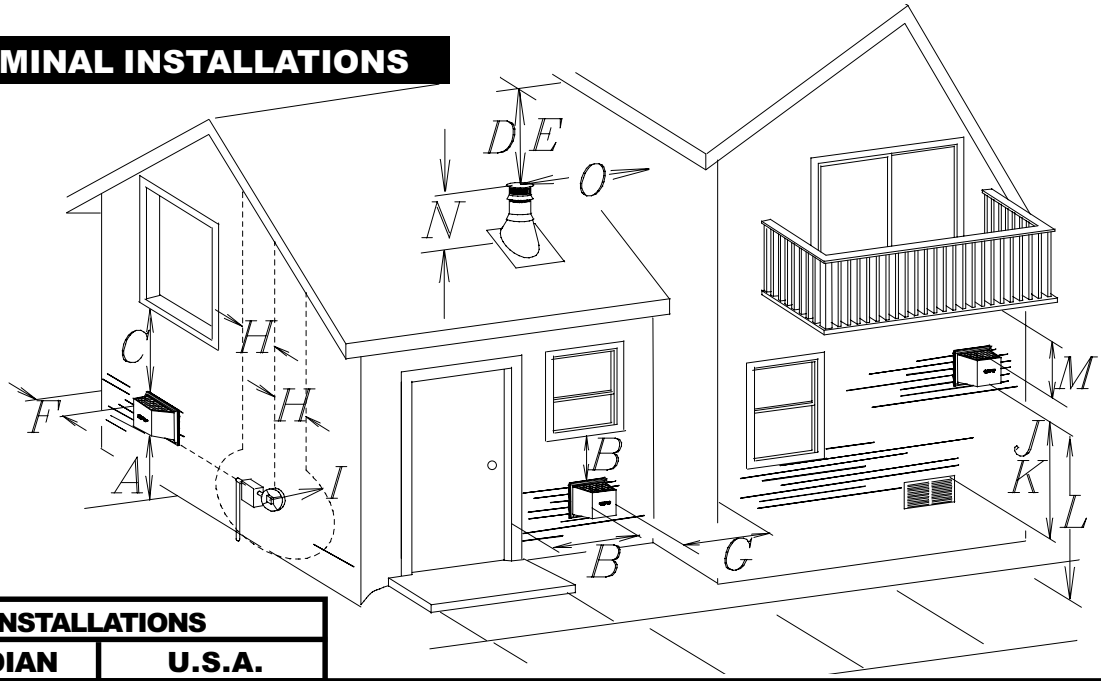
Do not allow the inside liner to bunch up on horizontal or vertical runs and elbows. Keep it pulled tight. A 1¼" air gap all around between the inner liner and outer liner is required for safe operation. Use a firestop when penetrating interior walls, floor or ceiling.

Horizontal runs may have a 0 inch rise per foot in all cases using SIMPSON DURA-VENT or NAPOLEON RIGID OR FLEXIBLE venting components when venting.

A clearance to combustibles of 1" all around the vent pipe is required.

AIR TERMINAL INSTALLATIONS

FIGURE 2



INSTALLATIONS			
CANADIAN	U.S.A.		
A	12 INCHES	12 INCHES	Clearance above grade, veranda porch, deck or balcony.
B	12 INCHES	9 INCHES	Clearance to windows or doors that open.
C	12 INCHES*	12 INCHES*	Clearance to permanently closed windows.
D	18 INCHES**	18 INCHES**	Vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 2 feet from the centerline of the terminal.
E	12 INCHES**	12 INCHES**	Clearance to unventilated soffit.
F	0 INCHES	0 INCHES	Clearance to an outside corner wall.
G	0 INCHES***	0 INCHES***	Clearance to an inside <i>non</i> -combustible corner wall or protruding <i>non</i> -combustible obstructions (chimney, etc.).
	2 INCHES***	2 INCHES***	Clearance to an inside combustible corner wall or protruding combustible obstructions (vent chase, etc.).
H	3 FEET	3 FEET****	Clearance to each side of the centerline extended above the meter / regulator assembly to a maximum vertical distance of 15ft.
I	3 FEET	3 FEET****	Clearance to a service regulator vent outlet.
J	12 INCHES	9 INCHES	Clearance to a non-mechanical air supply inlet to the building or a combustion air inlet to any other appliance.
K	6 FEET	3 FEET†	Clearance to a mechanical air supply inlet.
L	7 FEET‡	7 FEET****	Clearance above a paved sidewalk or paved driveway located on public property unless fitted with a heat shield kit GD-301.
M	12 INCHES††	12 INCHES****	Clearance under a veranda, porch, deck or balcony.
N	16 INCHES	16 INCHES	Clearance above the roof.
O	2 FEET†*	2 FEET†*	Clearance from an adjacent wall including neighbouring buildings.

* Recommended to prevent condensation on windows and thermal breakage

** It is recommended to use a heat shield and to maximize the distance to vinyl clad soffits.

*** The periscope GD-201 requires a minimum 18 inches clearance from an inside corner.

**** This is a recommended distance. For additional requirements check local codes.

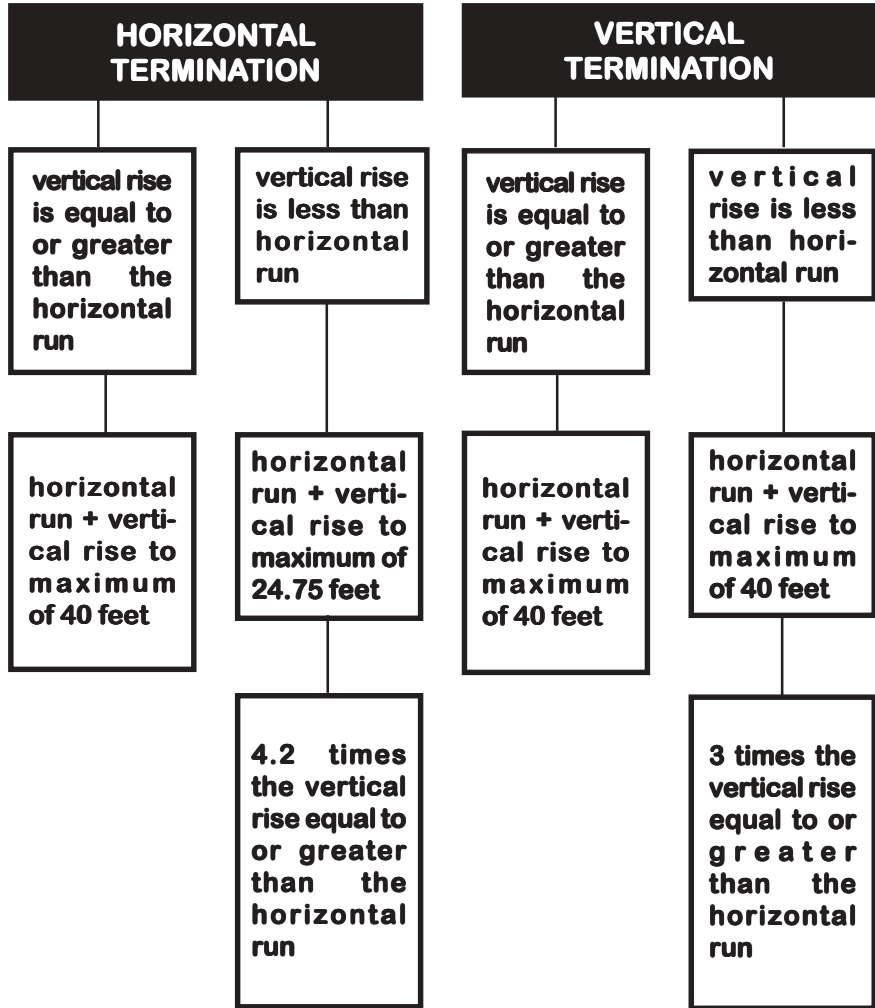
† Three feet above if within 10 feet horizontally.

‡ A vent shall not terminate directly above a sidewalk or paved driveway that is located between two single dwellings and serves both dwellings.

†† Permitted only if the veranda, porch, or deck is fully open on a minimum of two sides beneath the floor.

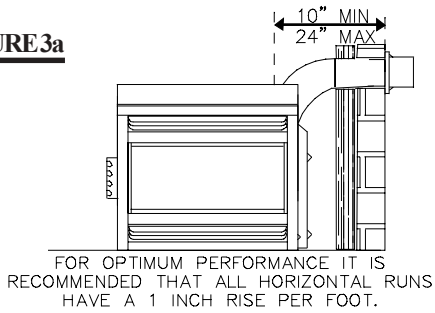
†* Recommended to prevent recirculation of exhaust products. For additional requirements check local code.

VENTING APPLICATION FLOWCHART

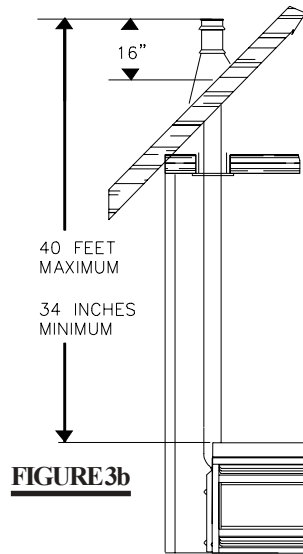


TYPICAL VENT INSTALLATIONS

FIGURE 3a



When venting, the horizontal run must be kept to a minimum of 10 inches or a maximum of 20 feet. If a 20 foot horizontal run is required, the fireplace must have a minimum vertical rise immediately off the fireplace of 57 inches. **FIGURE 3a.**



When terminating vertically, the vertical rise is a minimum 34 inches and a maximum 40 feet above the fireplace. **FIGURE 3b.**

SPECIAL VENT INSTALLATIONS

PERISCOPE TERMINATION

Use the GD401 periscope kit to locate the air termination above grade. The periscope must be installed so that when final grading is completed, the bottom air slot is located a minimum of 12 inches above grade. The maximum allowable vent length depends on the model of fireplace, as illustrated.

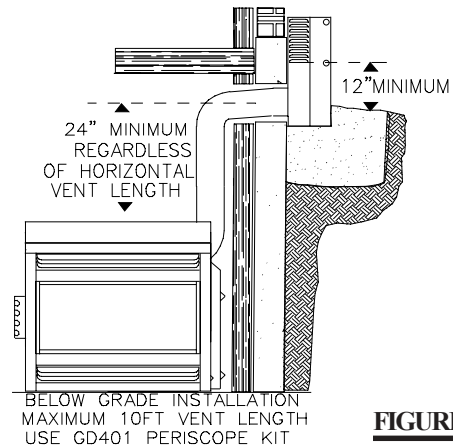


FIGURE 4

DEFINITIONS

for the following symbols used in the venting calculations and examples are:

- > - greater than
- ≥ - equal to or greater than
- < - less than
- ≤ - equal to or less than

H_T - total of both horizontal vent lengths (**H_R**) and offsets (**H_O**) in feet

H_R - combined horizontal vent lengths in feet

H_O - offset factor: .03(total degrees of offset - 135°*) in feet

V_T - combined vertical vent lengths in feet

ELBOW VENT LENGTH VALUES

	feet	inches
1°	0.03	0.5
15°	0.45	6.0
30°	0.9	11.0
45°*	1.35	16.0
90°*	2.7	32.0

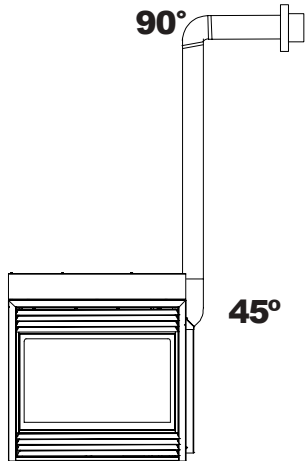
* the first 45° and 90° offset has a zero value and is shown in the formula as -45° and -90° respectively or -135° when combined.

HORIZONTAL TERMINATION

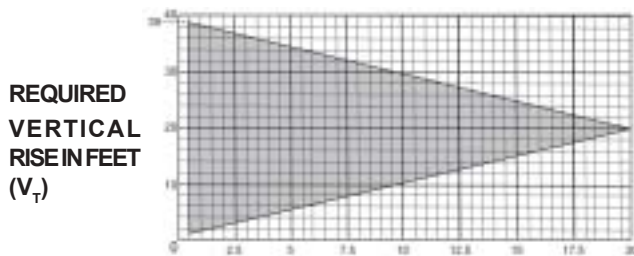
when (**H_T**) < (**V_T**)

Simple venting configuration (only one 45° and 90° elbow)

FIGURE 5



H_T - total of both horizontal vent lengths (**H_R**) and offsets (**H_O**) in feet



CALCULATED HORIZONTAL VENT RUN PLUS OFFSETS IN FEET (H_T)

The shaded area within the lines represents acceptable values for H_T and V_T.

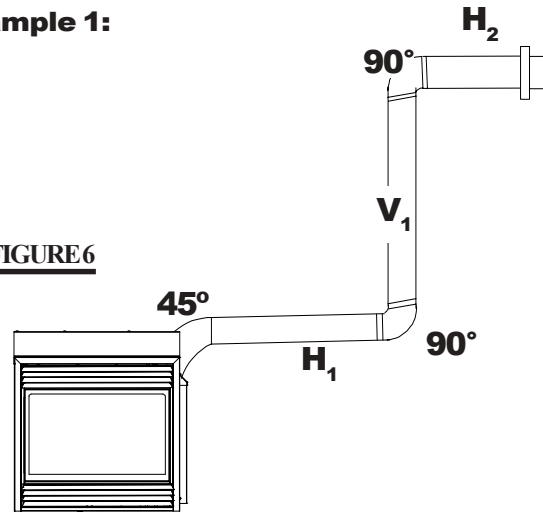
For vent configurations requiring more than one 45° and 90° elbow, the following formulas apply:

Formula 1: H_T < V_T

Formula 2: H_T + V_T < 40 feet

Example 1:

FIGURE 6



- V₁** = 8 ft
- V_T** = **V₁** = 8 ft
- H₁** = 2.5 ft
- H₂** = 2 ft
- H_R** = **H₁** + **H₂** = 2.5 + 2 = 4.5 ft
- H_O** = .03(one 45° elbow + two 90° elbows - 135°)
= 0.3(225-135°) = 2.7 ft
- H_T** = **H_R** + **H_O** = 4.5 + 2.7 = 7.2 ft

H_T + V_T = 7.2 + 8 = 15.2ft

Formula 1: **H_T < V_T**
7.2 < 8

Formula 2: **H_T + V_T < 40 feet**
15.2 < 40

Since both formulas are met, this vent configuration is acceptable.

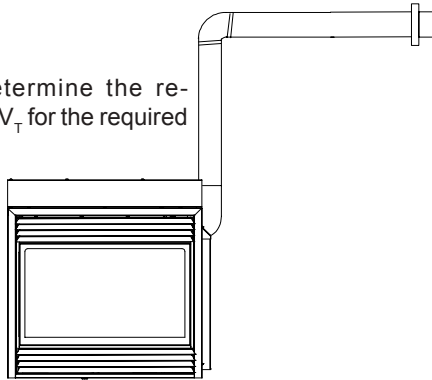
HORIZONTAL TERMINATION

when $(H_T) > (V_T)$

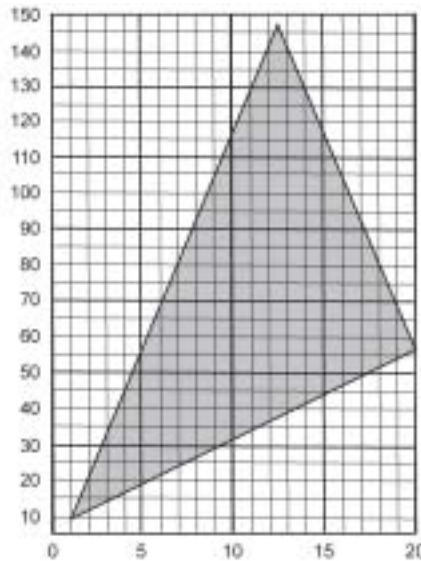
Simple venting configuration (only one 45° and 90° elbow)

FIGURE 7

See graph to determine the required vertical rise V_T for the required horizontal run H_T .



REQUIRED VERTICAL RISE IN INCHES (V_T)



HORIZONTAL VENT RUN PLUS OFFSETS IN FEET (H_T)

The shaded area within the lines represents acceptable values for H_T and V_T .

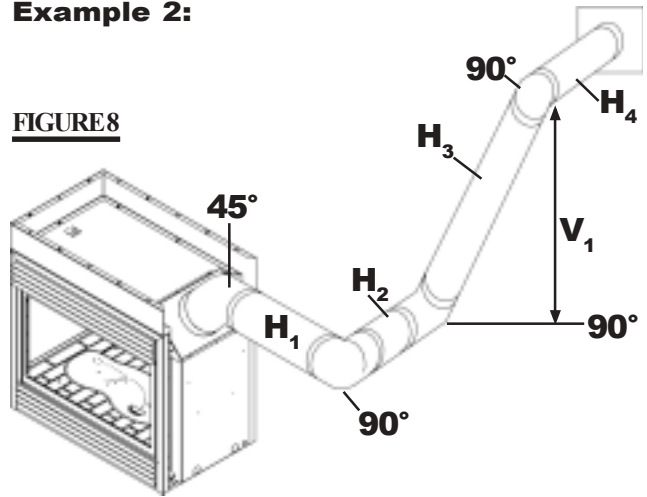
For vent configurations requiring more than one 45° and 90° elbow the following formulas apply:

Formula 1: $H_T < 4.2 V_T$

Formula 2: $H_T + V_T < 24.75 \text{ feet}$

Example 2:

FIGURE 8



$$\begin{aligned}
 V_1 &= 4 \text{ ft} \\
 V_T &= V_1 = 4 \text{ ft} \\
 H_1 &= 2 \text{ ft} \\
 H_2 &= 1 \text{ ft} \\
 H_3 &= 1 \text{ ft} \\
 H_4 &= 1.5 \text{ ft} \\
 H_R &= H_1 + H_2 + H_3 + H_4 = 2 + 1 + 1 + 1.5 = 5.5 \text{ ft} \\
 H_O &= .03(\text{one } 45^\circ \text{ elbow} + \text{three } 90^\circ \text{ elbow} - 135^\circ) \\
 &= .03(315 - 135) = 5.4 \text{ ft} \\
 H_T &= H_R + H_O = 5.5 + 5.4 = 10.9 \text{ ft} \\
 H_T + V_T &= 10.9 + 4 = 14.9 \text{ ft}
 \end{aligned}$$

Formula 1: $H_T < 4.2 V_T$

$$4.2 V_T = 4.2 \times 4 = 16.8 \text{ ft}$$

$$10.9 < 16.8$$

Formula 2: $H_T + V_T < 24.75 \text{ feet}$

$$14.9 < 24.75$$

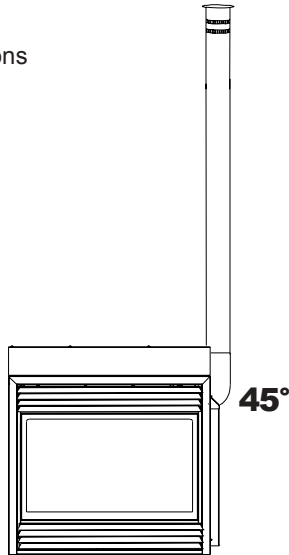
Since both formulas are met, this vent configuration is acceptable.

VERTICAL TERMINATION

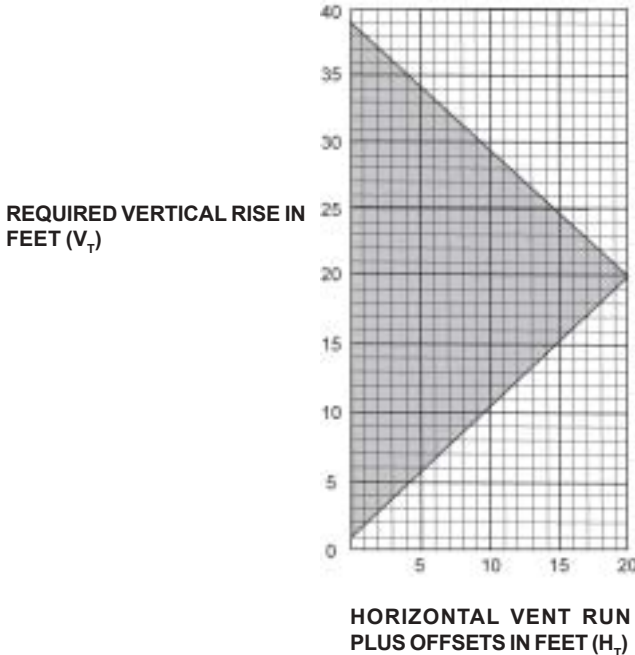
when $(H_T) < (V_T)$

Simple venting configurations

FIGURE 9



See graph to determine the required vertical rise V_T for the required horizontal run H_T .



The shaded area within the lines represents acceptable values for H_T and V_T .

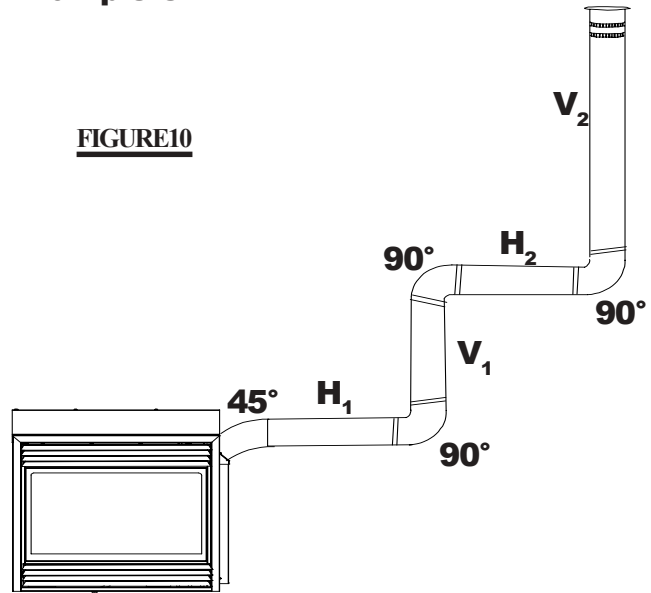
For vent configurations requiring more than one 45° and one 90° elbow, the following formulas apply:

Formula 1: $H_T < V_T$

Formula 2: $H_T + V_T < 40$ feet

Example 3:

FIGURE 10



- V_1 = 5 ft
- V_2 = 10 ft
- V_T = $V_1 + V_2 = 5 + 10 = 15$ ft
- H_1 = 3 ft
- H_2 = 2.5 ft
- H_R = $H_1 + H_2 = 3 + 2.5 = 5.5$ ft
- H_o = $.03(\text{one } 45^\circ \text{ elbow} + \text{three } 90^\circ \text{ elbows} - 135^\circ)$
 $= .03(45+90+90+90-135)=5.4$
- H_T = $H_R + H_o = 5.5 + 5.4 = 10.9$ ft
- $H_T + V_T = 10.9 + 15 = 25.9$ ft

Formula 1: $H_T < V_T$
 $10.9 < 15$

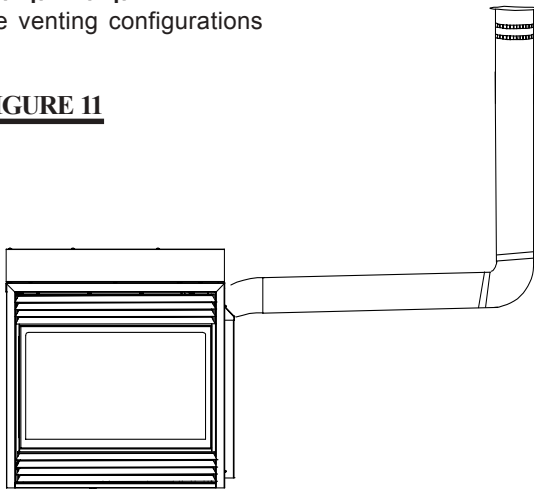
Formula 2: $H_T + V_T < 40$ feet
 $25.9 < 40$

Since both formulas are met, this vent configuration is acceptable.

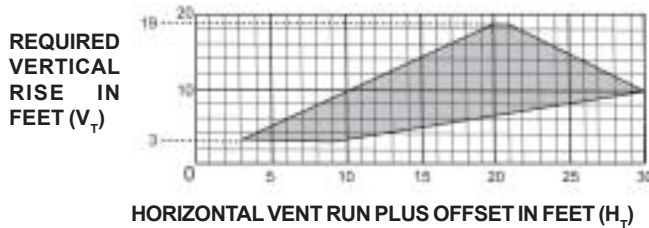
VERTICAL TERMINATION

when $(H_T) > (V_T)$
Simple venting configurations

FIGURE 11



See graph to determine the required vertical rise V_T for the required horizontal run H_T .



The shaded area within the lines represents acceptable values for H_T and V_T

For vent configurations requiring more than one 45° and one 90° elbow, the following formulas apply:

Formula 1: $H_T < 3V_T$

Formula 2: $H_T + V_T < 40$ feet

Example 4:

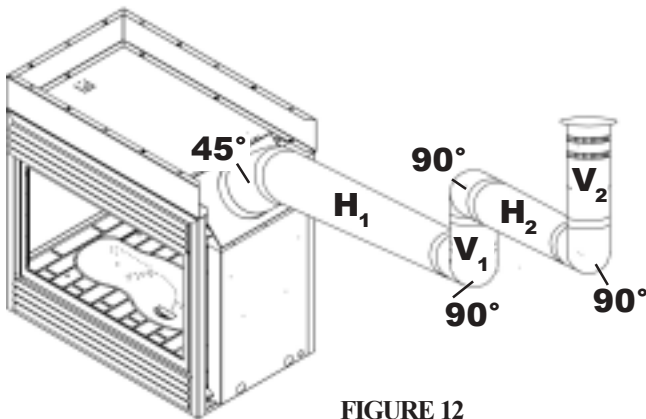


FIGURE 12

$$\begin{aligned}
 V_1 &= 1 \text{ ft} \\
 V_2 &= 1.5 \text{ ft} \\
 V_T &= V_1 + V_2 = 1 + 1.5 = 2.5 \text{ ft} \\
 H_1 &= 6 \text{ ft} \\
 H_2 &= 2 \text{ ft} \\
 H_R &= H_1 + H_2 = 6 + 2 = 8 \text{ ft} \\
 H_o &= .03(\text{one } 45^\circ \text{ elbow} + \text{three } 90^\circ \text{ elbow} - 135^\circ) \\
 &= .03(45 + 90 + 90 + 90 - 135) = 5.4 \text{ ft} \\
 H_T &= H_R + H_o = 8 + 5.4 = 13.4 \text{ ft} \\
 H_T + V_T &= 13.4 + 2.5 = 15.9 \text{ ft}
 \end{aligned}$$

Formula 1: $H_T < 3V_T$
 $3V_T = 3 \times 2.5 = 7.5$
 $13.4 > 7.5$

Since this formula is not met, this vent configuration is **unacceptable**.

Formula 2: $H_T + V_T < 40$ feet
 $15.9 < 40$

Since only formula 2 is met, this vent configuration is unacceptable and a new fireplace location or vent configuration will need to be established to satisfy both formulas.

Example 5:

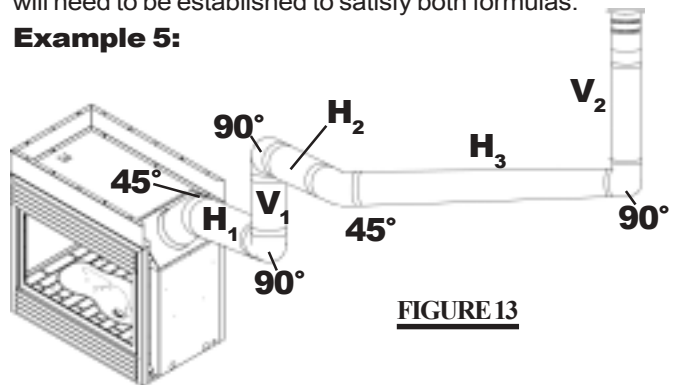


FIGURE 13

$$\begin{aligned}
 V_1 &= 1.5 \text{ ft} \\
 V_2 &= 8 \text{ ft} \\
 V_T &= V_1 + V_2 = 1.5 + 8 = 9.5 \text{ ft} \\
 H_1 &= 1 \text{ ft} \\
 H_2 &= 1 \text{ ft} \\
 H_3 &= 10.75 \text{ ft} \\
 H_R &= H_1 + H_2 + H_3 = 1 + 1 + 10.75 = 12.75 \text{ ft} \\
 H_o &= .03(\text{three } 90^\circ \text{ elbows} + \text{two } 45^\circ \text{ elbow} - 135^\circ) \\
 &= .03(90 + 90 + 90 + 45 + 45 - 135) = 6.75 \text{ ft} \\
 H_T &= H_R + H_o = 12.75 + 6.75 = 19.5 \text{ ft} \\
 H_T + V_T &= 19.5 + 4.5 = 29 \text{ ft}
 \end{aligned}$$

Formula 1: $H_T < 3V_T$
 $3V_T = 3 \times 9.5 = 28.5$
 $19.5 < 28.5$

Formula 2: $H_T + V_T < 40$ feet
 $29 < 40$

Since both formulas are met, this vent configuration is acceptable.

PENINSULA INSTALLATION PROCEDURE

VENTING

fer to pages 6-13. All venting must have a minimum clearance of 1" to combustible.

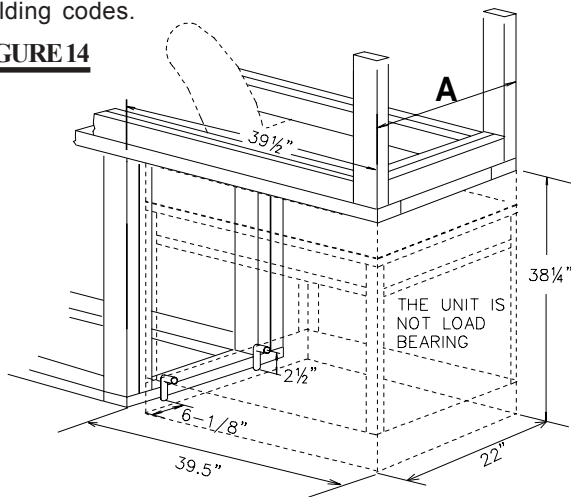
FRAMING

See Page 18 for additional framing dimensions.

Note: In order to avoid the possibility of exposed insulation or vapour barrier coming in contact with the fireplace body, it is recommended that the walls of the fireplace enclosure be "finished" (ie: drywall/sheetrock), as you would finish any other outside wall of a home. This will ensure that clearance to combustibles is maintained within the cavity.

It is best to frame your fireplace after it is positioned and the vent system is installed. Use 2x4's and frame to local building codes.

FIGURE 14



A = 22 " minus finishing material thickness each side.

To install the fireplace face flush with the finished wall, position the framework to accommodate the thickness of the finished wall.

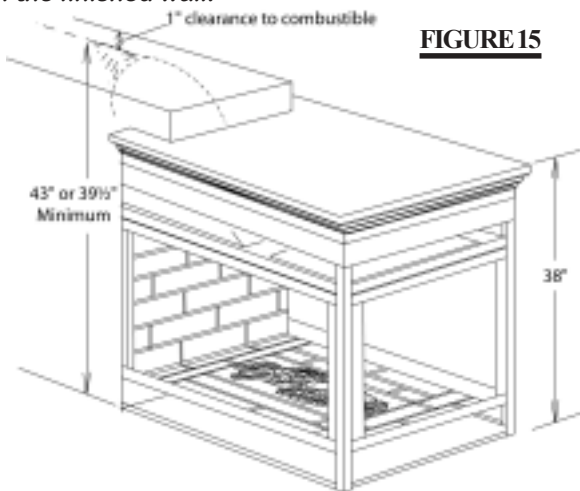


FIGURE 15

Care should be taken to maintain sufficient clearance for the vent installation. A horizontal vent installation requires a minimum height of 39 1/2" using rigid or 43" using flexible vent pipe. (including the 1" clearance to combustibles).

COUNTERTOP / BAR INSTALLATION

When finishing the fireplace, combustible material may rest directly on of the top extension. In order to achieve a countertop or bar type appearance with the minimum height allowed, framing must be non-combustible and may be done with metal studding attached to the top extension sides or the upper frame of the fireplace.

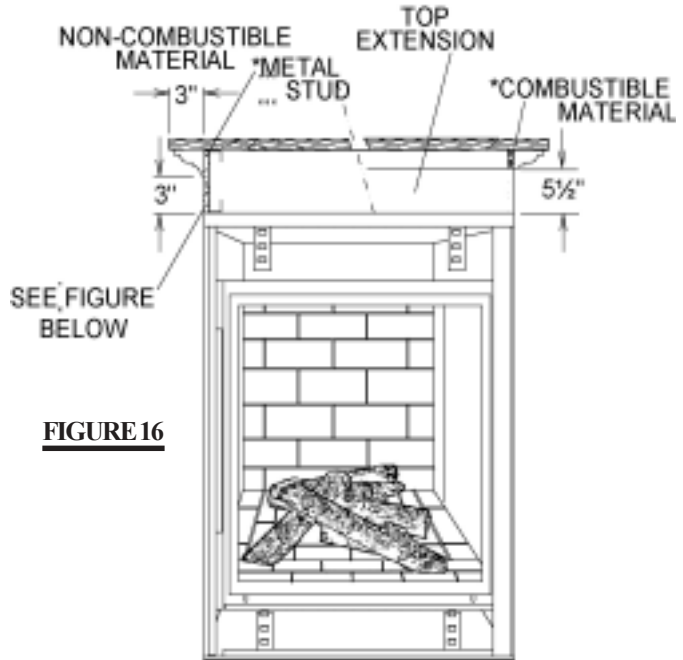


FIGURE 16

* The top extension may be removed if non-combustible framing is faced with a non-combustible material placed flush with the front face of the unit and extending from the top of the unit. (Example: cement board) (not supplied). Combustible counter / bar tops must maintain a minimum of 38 inches from the base of the fireplace to the underside of the top.

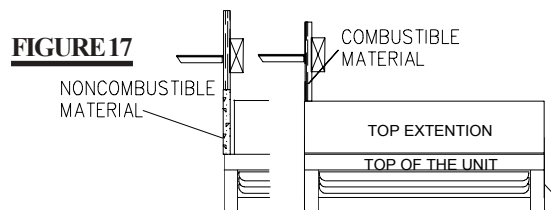
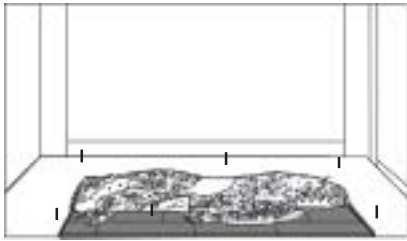


FIGURE 17

NOTE: Wolf Steel trim and/or surround kits will not totally cover the top extension of the fireplace. In order to obtain a smooth transition from the trim / surround to the wall, it is recommended that the top extension be removed and the unit be installed following the above procedure.

BRICK PANEL INSTALLATION

Install the base panels as illustrated in steps 1-4 . The side panel sits under the bracket tab. Holding the side panel in position, bend down the tab to secure. **DETAIL 5. FIGURES 18a-e**



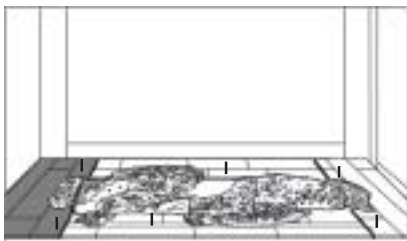
STEP 1



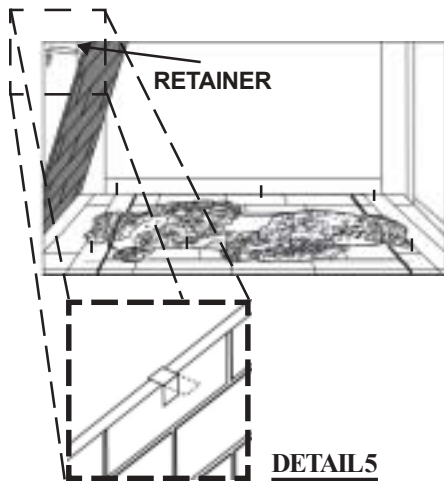
STEP 2



STEP 3



STEP 4



STEP 5

DETAIL 5

FACING

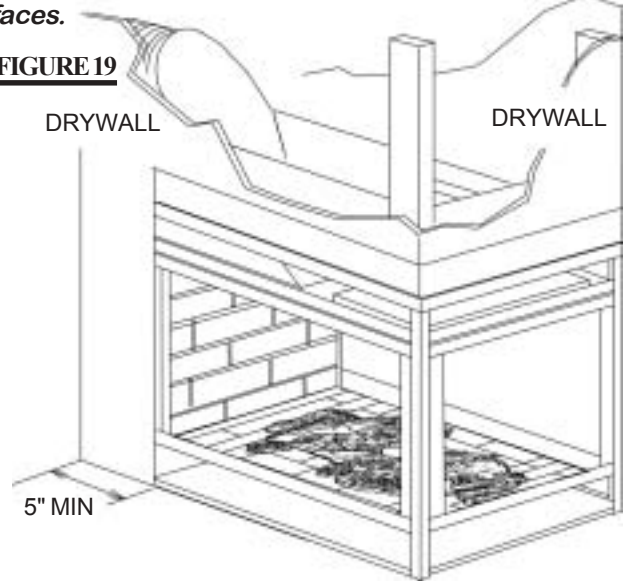
Combustible materials may be installed flush with the front of the fireplace but must not cover any of the black face-areas of the fireplace. Non-combustible material (brick, stone or ceramic tile) may protrude in these areas.

It is not necessary to install a hearth extension with this fireplace system.

When roughing in the fireplace, raise the fireplace to accommodate for the thickness of the finished floor materials, i.e. tile, carpeting, hard wood, which if not planned for will interfere with the opening of the lower access door and the installation of many decorative flashing accessories.

Objects placed in front of the fireplace should be kept a minimum of 48" away from the glass front faces.

FIGURE 19



FINISHING

Refer to pages 22-25 for complete instructions regarding mantle requirements and installations, log placement, glass door and upper and lower louver attachments.

SEE-THROUGH INSTALLATION PROCEDURE

VENTING

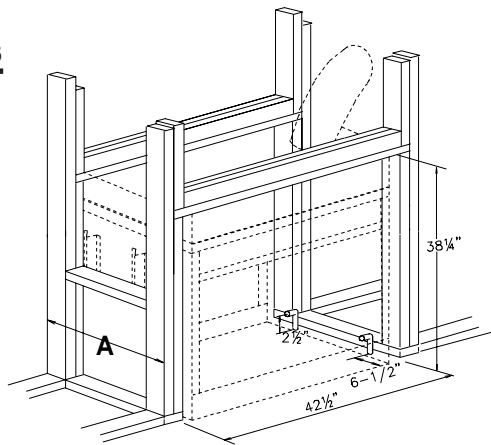
Refer to pages 6-13. All venting must have a minimum clearance of 1" to combustible.

FRAMING

See Page 18 for additional framing dimensions.

Note: In order to avoid the possibility of exposed insulation or vapour barrier coming in contact with the fireplace body, it is recommended that the walls of the fireplace enclosure be "finished" (ie: drywall/sheetrock), as you would finish any other outside wall of a home. This will ensure that clearance to combustibles is maintained within the cavity.

FIGURE 23

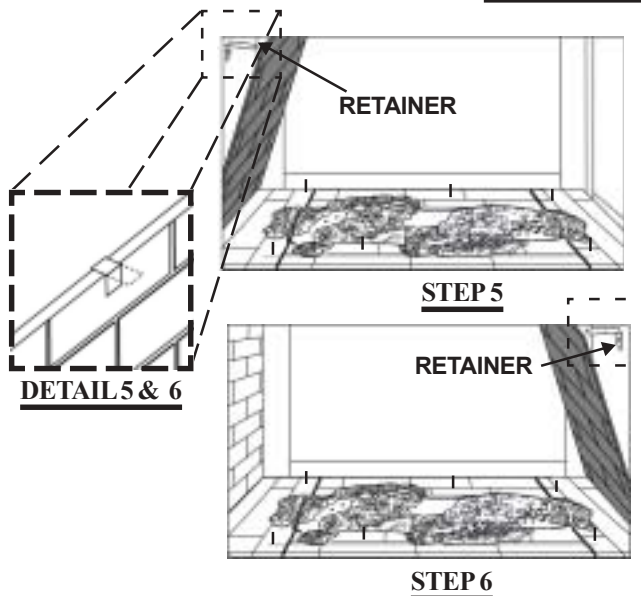


A = 22" minus finishing material thickness, each side.

BRICK PANEL INSTALLATION

Install the base panels as illustrated in steps 1-4 on page 15. Both side panels sit under the bracket tab. Holding the side panel in position, bend down the tab to secure. **DETAIL 6.**

FIGURES 24a-c



FACING

Combustible materials may be installed flush with the front of the fireplace but must not cover any of the black face-areas of the fireplace. Non-combustible material (brick, stone or ceramic tile) may protrude in these areas.

It is not necessary to install a hearth extension with this fireplace system.

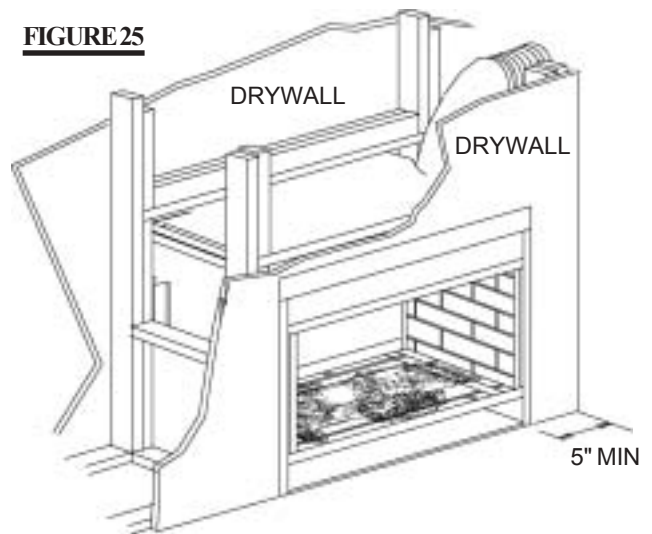
When roughing in the fireplace, raise the fireplace to accommodate for the thickness of the finished floor materials, i.e. tile, carpeting, hard wood, which if not planned for will interfere with the opening of the lower access door and the installation of many decorative flashing accessories.

Objects placed in front of the fireplace should be kept a minimum of 48" away from the glass front faces.

FINISHING

Refer to pages 22-25 for complete instructions regarding mantle requirements and installations, log placement, glass door and upper and lower louvre attachments.

FIGURE 25

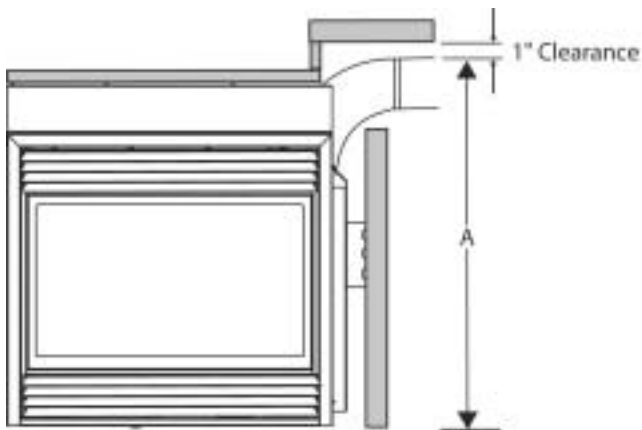


VENT FRAMING DIMENSIONS

There must be a minimum of 1" clearance to combustibles when framing around all venting options. *See pages 14-17.*

FIGURE 26

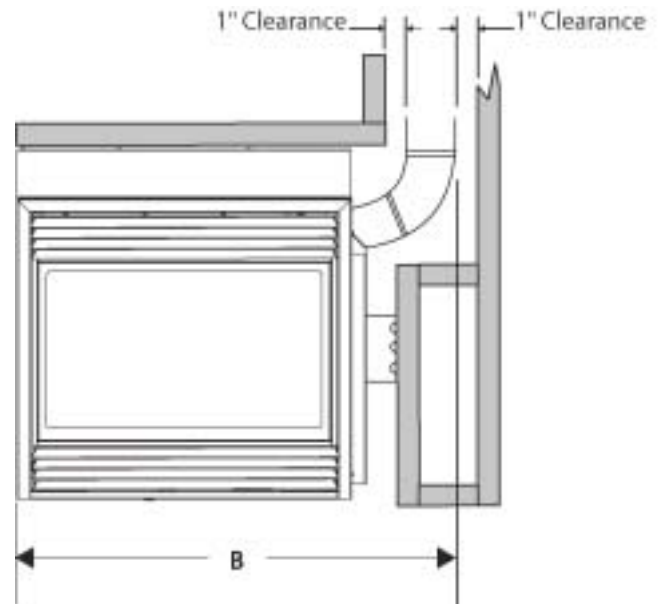
Horizontal Vent Off Fireplace



A = 42" using flexible vent components.
A = 38½" using Wolf Steel rigid vent components.

FIGURE 27

Vertical Vent Off Fireplace



B = 45" using flexible vent components.
B = 42½" using Wolf Steel rigid vent components.

INSTALLATION

WALL AND CEILING PROTECTION

For optimum performance it is recommended that all horizontal runs have a minimum 1 inch rise per foot using flexible venting.

For safe and proper operation of the fireplace, follow the venting instructions exactly.

HORIZONTAL INSTALLATION

This application occurs when venting through an exterior wall. Having determined the air terminal location, cut and frame a hole in an exterior wall with a minimum square or round opening of 10½". (As an alternative to framing, a vent pipe shield may be installed, ensuring a 1" clearance to combustibles.

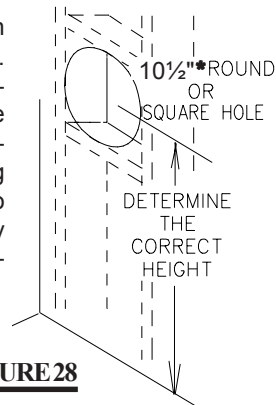


FIGURE 28

Mark and cut the vent pipe shield to the determined depth of the combustible wall. Apply a bead of caulking (not supplied) to the framework or to the shield plate (in the case of a finished wall) and secure the shield through the opening to the interior wall. *The final location of the vent pipe shield should maintain the required clearance to the 8" vent pipe / liner. Do not fill this cavity with any type of material.* Apply a bead of caulking all around and place a firestop spacer over the vent shield to restrict cold air from being drawn into the room or around the fireplace. Ensure that both spacer and shield maintain the required clearance to combustibles. Once the vent pipe / liner is installed in its final position, apply sealant between the pipe / liner and the firestop spacer.

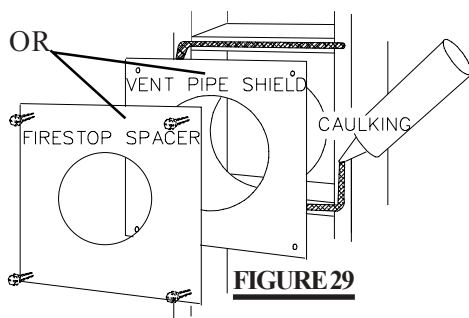
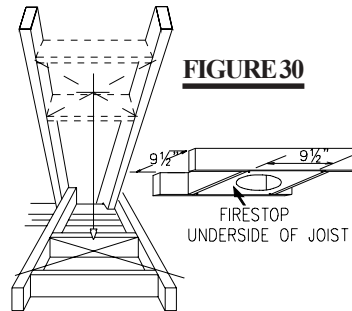


FIGURE 29

VERTICAL INSTALLATION

This application occurs when venting through a roof. Installation kits for various roof pitches are available from your Napoleon dealer. See Accessories to order the specific kit required.



1. Determine the air terminal location, cut and frame 10½ inch openings in the ceiling and the roof to provide the minimum clearance between the fireplace pipe / liner and any combustible material. Try to center the exhaust pipe location midway between two joist to prevent having to cut them. Use a plumb bob to line up the center of the openings.

DO NOT FILL THIS SPACE WITH ANY TYPE OF MATERIAL.

A vent pipe shield will prevent any materials such as insulation, from filling up the 1" air space around the pipe. Nail headers between the joist for extra support.

FIGURE 31

2. Apply a bead of caulking (not supplied) to the framework or to the Wolf Steel vent pipe shield plate or equivalent (in the case of a finished ceiling), and secure over the opening in the ceiling. A firestop must be placed on the bottom of each framed opening in a roof or ceiling that the venting system passes through. Apply a bead of caulking all around and place a firestop spacer over the vent shield to restrict cold air from being drawn into the room or around the fireplace. Ensure that both spacer and shield maintain the required clearance to combustibles. Once the vent pipe / liner is installed in its final position, apply sealant between the pipe / liner and the firestop spacer.

3. In the attic, after the pipe / liner has been installed, slide the vent pipe collar down to cover up the open end of the shield and tighten. This will prevent any materials, such as insulation, from filling up the 1" air space around the pipe.

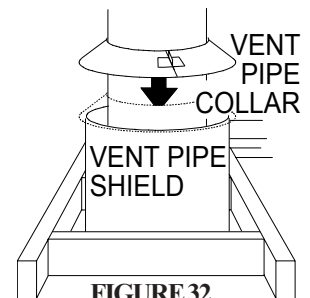


FIGURE 32

USING FLEXIBLE VENT COMPONENTS

Use only approved aluminum flexible liner kits marked:



FIGURE 33

For optimum performance, it is recommended that horizontal runs have a minimum ¼ inch rise per foot.

"Wolf Steel Approved Venting" as identified by the stamp only on the 8" outer liner.

For safe and proper operation of the fireplace, follow the venting instructions exactly.

HORIZONTAL AIR TERMINAL INSTALLATION

1. Stretch the 5" diameter aluminum flexible liner to the required length taking into account the additional length needed for the finished wall surface. Apply a heavy bead of the high temperature sealant, supplied with the unit, to the inside of the 5" liner approximately 1" from the end. Slip the liner a minimum of 2" over the fireplace vent collar and secure with 3 #8 screws.

2. Using the 8" diameter flexible aluminum liner, apply sealant, slide a minimum of 2" over the fireplace combustion air collar and secure with 3 #8 screws.

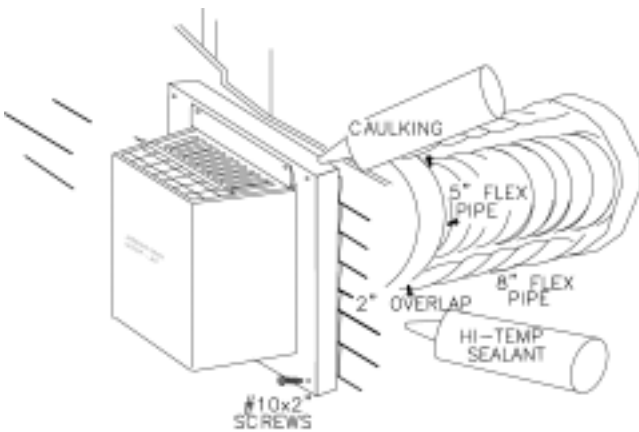
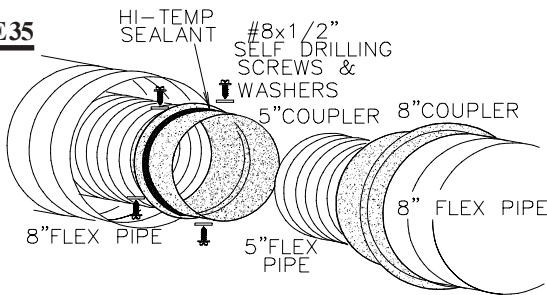


FIGURE 34

The air terminal may be recessed into the exterior wall or siding by 1½", the depth of the return flange.

FIGURE 35



3. Insert the liners through the firestop. Position and secure the fireplace using the nailing tabs (2 per side) and/or secure to the floor using screws inserted through the two ¼" diameter holes in the front left and right corners of the base. The liners should be flush with the exterior wall.

5. From outside, apply a bead of the high temperature sealant to the inside of both liners, approximately 1" from the end of each liner.

5. Holding the air terminal (lettering in an upright, readable position), insert into both liners with a twisting motion to ensure that both the terminal sleeves engage into the liners / sealant. Secure the terminal to the exterior wall and make weather tight by sealing with caulking (not supplied).

6. If more liner needs to be used to reach the fireplace, couple them together as illustrated. The vent system must be supported approximately every 3 feet for both vertical and horizontal runs. Use Napoleon support ring assembly **W010-0380** or equivalent noncombustible strapping to maintain the minimum 1" clearance to combustibles.

VERTICAL AIR TERMINAL INSTALLATION

1. Fasten the roof support to the roof using the screws provided. The roof support is optional. In this case the venting is to be adequately supported using either an alternate method suitable to the authority having jurisdiction or the optional roof support.

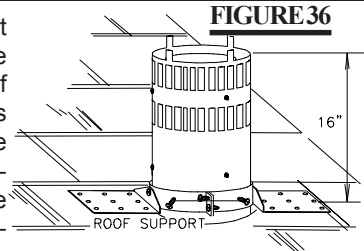


FIGURE 36

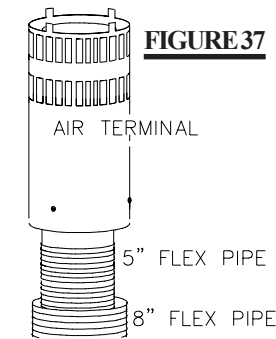


FIGURE 37

2. Stretch the 5" diameter aluminum flexible liner to the required length. Slip the liner a minimum of 2" over the inner sleeve of the air terminal and secure with 3 #8 screws. Seal using a heavy bead of the high temperature sealant.

3. Repeat using 8" diameter aluminum flexible liner.

5. Thread the air terminal pipe assembly down through the roof. The air terminal must be located vertically and plumb. Attach the air terminal assembly to the roof support, ensuring that a minimum 16" of air terminal will penetrate the roof when fastened.

DO NOT CLAMP THE FLEXIBLE ALUMINUM LINER.

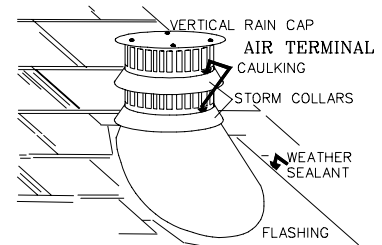


FIGURE 38

5. Remove nails from the shingles, above and to the sides of the chimney. Place the flashing over the air terminal and slide it underneath the sides and upper edge of the shingles. Ensure that the air terminal is properly centered within the flashing, giving a 3/5" margin all around. Fasten to the roof. Do **not** nail through the lower portion of the flashing. Make weather-tight by sealing with caulking. Where possible, cover the sides and top edges of the flashing with roofing material.

6. Apply a heavy bead of weatherproof caulking 2 inches above the flashing. Slide the storm collar around the air terminal and down to the caulking. Tighten to ensure that a weather-tight seal between the air terminal and the collar is achieved. Attach the other storm collar centered between the air intake and the air exhaust slots onto the air terminal. Tighten securely. Attach the vertical rain cap.

Spacers are attached to the 5" inner flex liner at predetermined intervals to maintain a 1-1/5" air gap to the 8" outer liner. These spacers must not be removed.

7. If more liner needs to be used to reach the fireplace, couple them together as illustrated. The vent system must be supported approximately every 3 feet for both vertical and horizontal runs. Use Wolf Steel support ring assembly **W010-0370** or equivalent noncombustible strapping to maintain a clearance to combustibles of 1".

FIREPLACE VENT CONNECTION

1. Install the 5 inch diameter aluminum flexible liner to the fireplace. Secure with 3 screws and flat washers. Seal the joint and screw holes using the high temperature sealant provided.

2. Install the 8 inch diameter aluminum flexible liner to the fireplace. Attach and seal the joints.

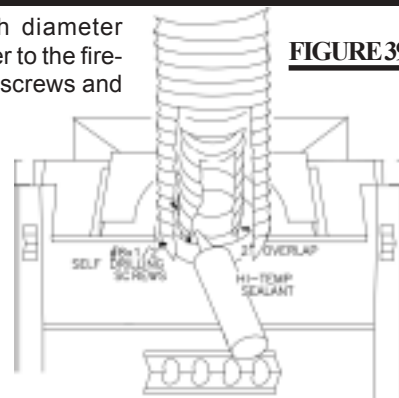


FIGURE 39

USING RIGID VENT COMPONENTS

For optimum performance it is recommended that all horizontal runs have a 1/4 inch rise per foot.

For safe and proper operation of the fireplace, follow the venting instructions exactly.

The vent system must be supported approximately every 3 feet for both vertical and horizontal runs. Use Napoleon vent spacers **W615-0033** every 3 feet and on either side of each elbow to maintain the minimum 1/4" clearance between the outer and inner vent pipes. Use Napoleon support ring assembly **W010-0380** or equivalent noncombustible strapping to maintain the minimum 1" clearance to combustibles for both vertical and horizontal runs.

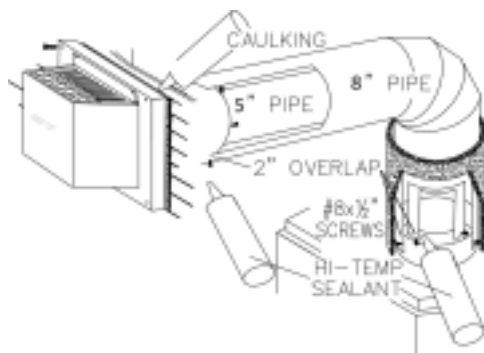
HORIZONTAL AIR TERMINAL INSTALLATION

1. Move the fireplace into position. Measure the vent length required between terminal and fireplace taking into account the additional length needed for the finished wall surface and any 1/4" overlaps between venting components.

2. Apply high temperature sealant to the outer edge of the 5" inner collar of the fireplace. Attach the first vent component and secure using 3 self tapping screws. Repeat using 8" piping.

3. Holding the air terminal (lettering in an upright, readable position), insert into both vent pipes with a twisting motion to ensure that both the terminal sleeves engage into the vent pipes and the sealant. Secure the terminal to the exterior wall and make weather tight by sealing with caulking (not supplied). **The air terminal may be recessed into the exterior wall or siding by 1 1/2", the depth of the return flange.**

FIGURE 40



VERTICAL AIR TERMINAL INSTALLATION

1. Move the fireplace into position.

2. Fasten the roof support to the roof using the screws provided. The roof support is optional. In this case the venting is to be adequately supported using either an alternate method suitable to the authority having jurisdiction or the optional roof support.

3. Apply high temperature sealant to the outer edge of the inner sleeve of the air terminal. Slip a 5" diameter coupler a minimum of 2" over the sleeve and secure using 3 screws.

5. Apply high temperature sealant to the outer edge of the of the outside sleeve of the air terminal. Slip a 8" diameter coupler over the sleeve and secure as before. Trim the 8" coupler even with the 5" coupler end.

5. Thread the air terminal pipe assembly down through the roof support and attach, ensuring that a minimum 16" of air terminal will penetrate the roof when fastened. **If the attic space is tight, we recommend threading the Wolf Steel vent pipe collar or equivalent loosely onto the air terminal assembly as it is passed through the attic.**

The air terminal must be located vertically and plumb.

6. Remove nails from the shingles, above and to the sides of the chimney. Place the flashing over the air terminal and slide it underneath the sides and upper edge of the shingles. Ensure that the air terminal is properly centered within the flashing, giving a 3/5" margin all around. Fasten to the roof. Do **NOT** nail through the lower portion of the flashing. Make weather-tight by sealing with caulking. Where possible, cover the sides and top edges of the flashing with roofing material.

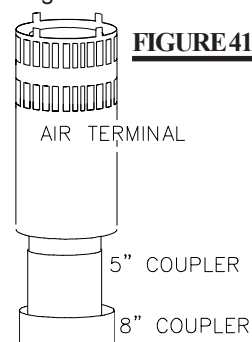


FIGURE 41

8. Apply a heavy bead of waterproof caulking 2 inches above the flashing. Slide the storm collar around the air terminal and down to the caulking. Tighten to ensure that a weather-tight seal between the air terminal and the collar is achieved. Attach the other storm collar centered between the air intake and air exhaust slots onto the air terminal. Tighten securely. Attach the rain cap.

8. Continue adding rigid venting sections, sealing and securing as above. Attach a 5" collapsed telescopic pipe to the last section of rigid piping. Secure with screws and seal. Repeat using a 8" telescopic pipe.

9. Run a bead of high temperature sealant around the outside of the 5" elbow. Pull the adjustable pipe a minimum 2" onto the elbow. Secure with 3 screws. Repeat with the 8" telescopic pipe.

10. In the attic, slide the vent pipe collar down to cover up the open end of the shield and tighten. This will prevent any materials, such as insulation, from filling up the 1" air space around the pipe.

It is best to frame your fireplace after it is positioned and the vent system is installed. Use 2x4's and frame to local building codes.

See PAGE 14 for bar type / countertop installation.

GAS INSTALLATION

1. Move the fireplace into position and secure to the floor using #10 hex head screws (not supplied).

2. Route a 3/8" N.P.T. black iron gas line, 1/2" type-L copper tubing or equivalent to the fireplace.

3. For ease of accessibility, an optional remote wall switch or millivolt thermostat may be installed in a convenient location. Route 2-strand (solid core) millivolt wire through the electrical hole located at the bottom left side of the unit.

The recommended maximum lead length depends on wire size:

WIRE SIZE	MAX. LENGTH
14 gauge	100 feet
16 gauge	60 feet
18 gauge	40 feet

Do not connect either the wall switch, thermostat or gas valve to electricity (110 volts).

Attach the two leads to terminals 1 and 3 located on the gas valve.

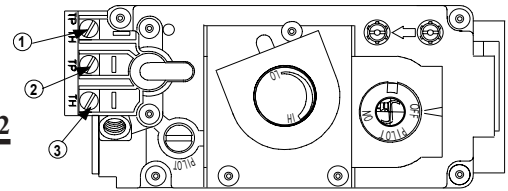


FIGURE 42

4. Install the rigid black pipe, 1/2" type-L copper tubing or, if local codes permit, a 3/8" flex connector and shutoff valve to the gas line and the fireplace gas valve. Seal and tighten securely. An adapter fitting is required between the gas valve and the copper tubing or flex connector.

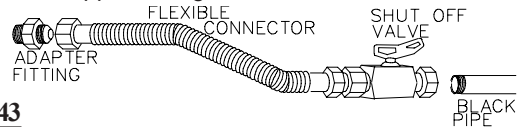


FIGURE 43

Do not kink flexible connector.

5. Check for gas leaks by brushing on a soap and water solution.

Do not use open flame.

6. Mark the appropriate boxes on the rating plate label to indicate the model type.

FIGURE 44

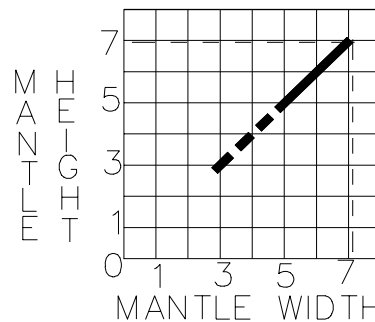
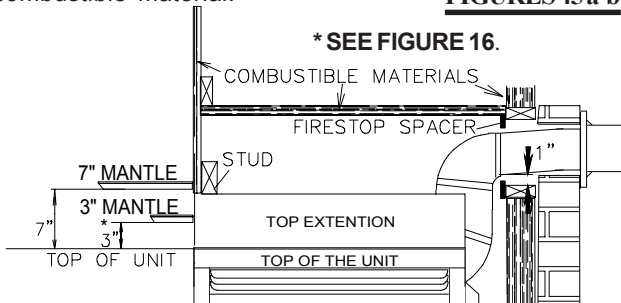


FINISHING

MANTLE INSTALLATION

Combustible mantle clearance can vary according to the mantle depth. Use the graph to help evaluate the clearance needed. The three-sided top extension piece may be removed if non-combustible framing is faced with a non-combustible material.

FIGURES 45a-b



Dashed lines are suitable mantle sizes and clearances when a non-combustible facing is used.

LOG PLACEMENT

PHAZER™ logs, glowing and charcoal embers, exclusive to Napoleon fireplaces, provide a unique and realistic glowing effect that is different in every installation. Take the time to carefully position the embers for a maximum glowing effect. **Figures 46 A - H.**



1. Looking at the unit from the valve side, place log #1 diagonally across the textured burner cover onto the pins. The texture is designed to cradle the underside of the log.



2. Depending on the type of installation, the view of the log positioning will reverse. Here the lower end of log #2 rests near the *back left* corner of the firebox on the locating pin. The upper end sits on top of log #1, inside the groove on log #2.



3. Log #3 is made up of two pieces, a and b. Piece #3a is the base of log #3. The base sits diagonally in the designated area located between logs #1 and #2 and fits tight up against #2.

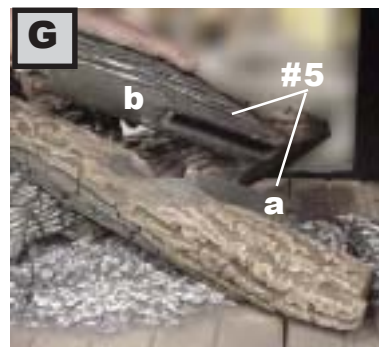
4. The slot in the underside of piece #3b fits over #3a. Place the end of piece #3b onto the pin.



5. When pieces #3a and #3b are attached to create log #3, the upper end of log #3 should rest in the groove, on top of log #2.



6. As with log #1, log #4 is also cradled by the texture of the burner cover and the pin in the base. Position log #4 so that the lower end fits onto the pin. The upper end rests against the moulded locator on the top of log #1.



7. Like log #3, log #5 also comes in two pieces. The base (#5a) slopes outwards between logs #2 and #4. As with pieces #3a & b, piece #5b fits over piece #5a. Place the end of piece #5b onto the pin.



8. The upper end of log #5 rests in the groove, on top of log #4 and creates the final appearance of log set.

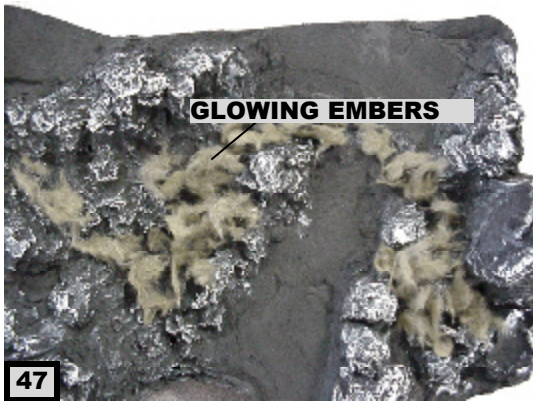
GLOWING EMBERS

Tear the embers into small pieces and place on the ported area of the burner. Care should be taken to shred the embers into thin, small irregular pieces as only the exposed edges of the fibre hairs will glow. *The ember material will only glow when exposed to direct flame; however, care should be taken to not block the burner ports.* Blocked burner ports can cause an incorrect flame pattern, carbon deposits and delayed ignition. **PHAZER™** logs glow when exposed to direct flame.

CHARCOAL EMBERS

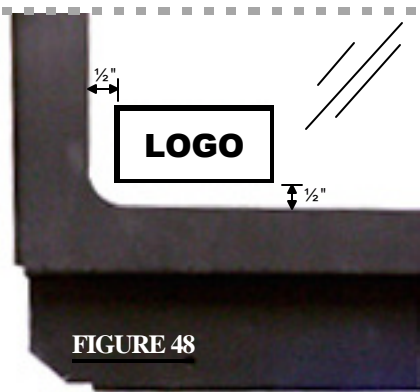
Randomly place the embers around the bottom brick panels in a realistic manner but not in contact with the flames. Keep ember dust away from burner ports to avoid plugging them.

Fine dust found in bottom of bag not to be used. **PHAZER™** logs, and embers glow when exposed to direct flame. Use only certified **PHAZER™** logs, glowing embers and charcoal embers available from your Napoleon / Wolf Steel Ltd. dealer.

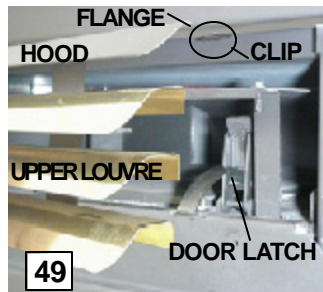


LOGO PLACEMENT

Remove the backing of the logo supplied and place on the glass viewing door, as indicated.



DOOR INSTALLATION



DOOR OPENING AND CLOSING: The upper louvres must be removed to allow the door to be opened or closed. To access the lower door latch, open the valve control door. Release the top and bottom door latches, located at the right side of the door.

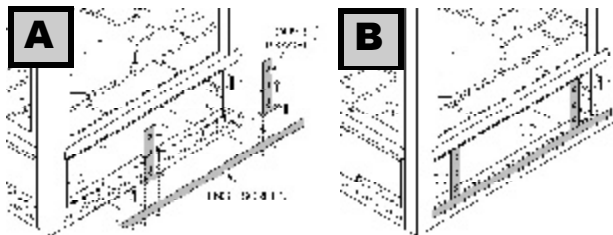
UPPER LOUVRE BRACKETS & HOOD



Attach the hood with louvre brackets by pressing the top flange of the bracket into the clips along the top of the louvre opening with louvre securing tabs facing out.

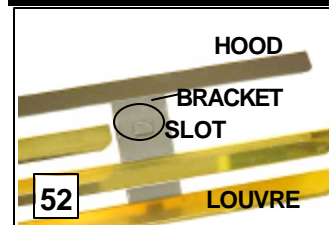
LOWER LOUVRE BRACKETS & HINGE SCREEN

FIGURES 51 a-b

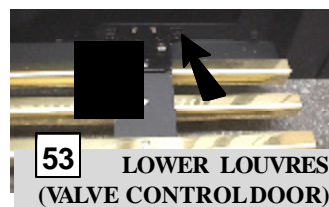


Using 6 screws, attach the lower louvre brackets and hinge screen as illustrated. **Be sure to install the louvre brackets over the hinge screen.**

GVFL INSTALLATION

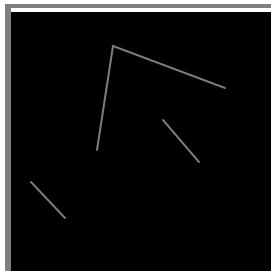
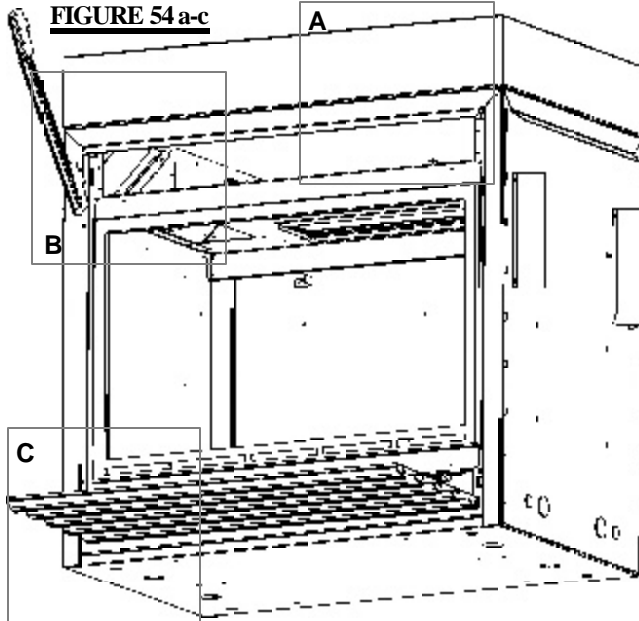


TO INSTALL THE UPPER LOUVRES: Insert the upper louvres into the slots on both brackets. Press the top flange of the hood into the four clips located along the top of the unit as shown.



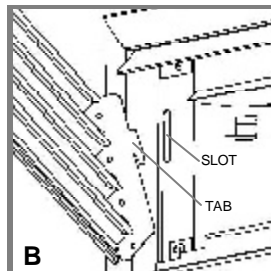
TO INSTALL THE LOWER LOUVRE ASSEMBLY: Attach each hinge to the fire-box with 2 screws.

L36 LOUVRE INSTALLATION



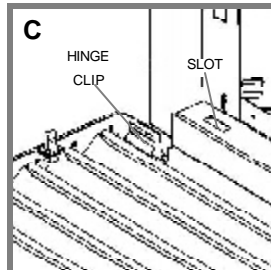
HOOD

Attach the hood by pressing the top flange into the clips along the top of the louvre opening. Secure using a screw through the centre slot.



UPPER LOUVRES

Insert the louvre tabs into the slots located at the top left and right corners of the unit.



LOWER LOUVRES

Insert the hinge clips into the slots located at the bottom left and right corners of the unit.

To remove the louvres, pull the back tabs of the clips forward, while pushing the louvre assembly back. Lift the clip.

END DOOR INSTALLATION

Ensure that the door is properly clipped onto the steel lip to prevent overheating, glass breakage and / or discolouration of the upper trim.



FIGURE 56



To install the door(s), hook it over the steel lip located above the door opening.

Secure with screws along the bottom of the door. Tighten screws snugly. **Do not over-tighten.**



OPTIONAL BLOWER INSTALLATION

INSTALLATION TO BE DONE BY A QUALIFIED INSTALLER and must be electrically connected and grounded in accordance with local codes. In the absence of local codes, use the current CSA C22.1 CANADIAN ELECTRICAL CODE in Canada or the ANSI/NFPA 70 NATIONAL ELECTRICAL CODE in the United States.

Remove the blower from its mounting bracket and attach to the bracket supplied with the fireplace. This bracket is found secured on the mounting stud located at the bottom of the vent side wall.

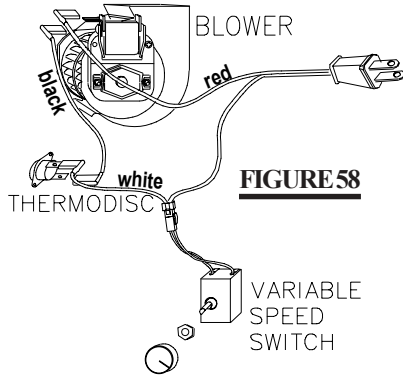


FIGURE 58

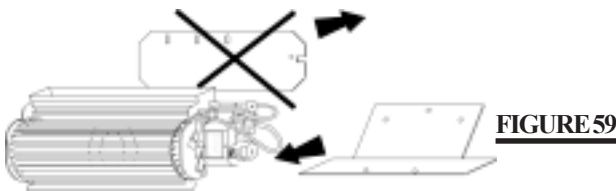
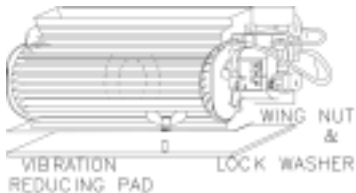


FIGURE 59

FIGURE 60



The blower bracket contains two holes that allow the blower to be positioned away from the intended gas supply hole.

Position the vibration reducing pad, centred, onto the threaded stud, piercing a hole into the pad. The blower must be able to be positioned entirely onto the pad.

Tilt the blower onto its side and slide it past the controls. Position the blower under the clip and onto the stud. Secure with a wing nut.

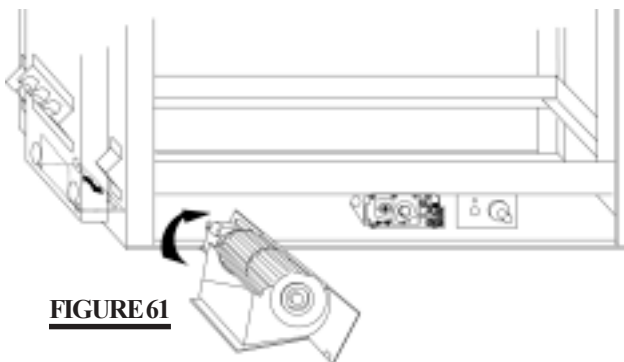


FIGURE 61

Remove the "Z" shaped mounting bracket secured to the burner, by the pilot. Remove the thermodisc from the bracket supplied in the blower kit and attach to the mounting bracket. Attach the connectors from the black and white wires to the thermodisc.



FIGURE 62

Do not overtighten thermodisc or distort housing.

Attach the connectors from the black and red wires to the blower. Attach and secure the variable speed switch using the nut provided. Plug the harness cord into the receptacle.

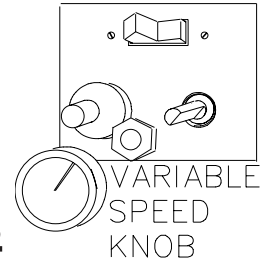


FIGURE 63

The wire harness provided in this kit is a universal harness. When installed, ensure that any excess wire is contained, preventing it from making contact with moving or hot objects.

Drywall dust will penetrate into the blower bearings, causing irreparable damage. Care must be taken to prevent drywall dust from coming into contact with the blower or its compartment. Any damage resulting from this condition is not covered by the warranty policy.

Because the blower is thermally activated, when turned on, it will automatically start approximately 10 minutes after lighting the fireplace and will run for approximately 30 - 45 minutes after the fireplace has been turned off. Use of the fan increases the output of heat.

OPERATION / MAINTENANCE

When lit for the first time, the fireplace will emit a slight odour for a few hours. This is a normal temporary condition caused by the curing of the logs and the "burn-in" of internal paints and lubricants used in the manufacturing process and will not occur again. Simply open a window to sufficiently ventilate the room.

After extended periods of non-operation such as following a vacation or a warm weather season, the fireplace may emit a slight odour for a few hours. This is caused by dust particles in the heat exchanger burning off.

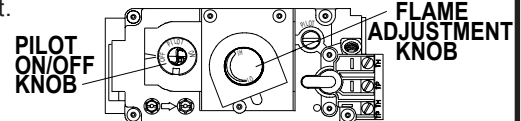
Purge the gas line with a glass door open. Assure that a continuous gas flow is at the burner before re-installing the door.

FOR YOUR SAFETY READ BEFORE LIGHTING:

- A. This fireplace is equipped with a pilot which must be lit by hand while following these instructions exactly.
- B. Before operating smell all around the fireplace area for gas and next to the floor because some gas is heavier than air and will settle on the floor.
- C. Use only your hand to turn the gas control knob. Never use tools. If the knob will not turn by hand, do not try to repair it. Call a qualified service technician. Force or attempted repair may result in a fire or explosion.
- D. Do not use this fireplace if any part has been under water. Immediately call a qualified service technician to inspect the fireplace and replace any part of the control system and any gas control which has been under water.

WHAT TO DO IF YOU SMELL GAS:

- Turn off all gas to the fireplace.
- Open windows.
- Do not try to light any appliance.
- Do not touch any electric switch; do not use any phone in your building.
- Immediately call your gas supplier from **GAS KNOB** a neighbour's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.



LIGHTING INSTRUCTIONS

WARNING: The gas valve has an interlock device which will not allow the pilot burner to be lit until the thermocouple has cooled. Allow approximately 60 seconds for the thermocouple to cool.

When lighting and re-lighting, the gas knob cannot be turned from pilot to off unless the knob is **depressed slightly**.

1. Stop! Read the above safety information on this label.
2. Turn off all electric power to the fireplace.
3. Turn the gas knob clockwise to off.
4. Wait five (5) minutes to clear out any gas. If you smell gas including near the floor. Stop! Follow "B" in the above safety information on this label. If you don't smell gas go the next step.
5. Turn gas knob counter-clockwise to pilot.
6. Depress slightly and hold gas knob while lighting the pilot with the push button ignitor. Keep knob depressed for one minute, then release. If pilot does not continue to burn, repeat steps 3 through 5.
7. With pilot lit, depress and turn gas knob counter-clockwise to on.
8. If equipped with remote on-off switch/thermostat, main burner may not come on when you turn valve to on. Remote switch must be in the on position to ignite burner.
9. Turn on all electric power to the fireplace.

TO TURN OFF GAS

1. Turn off all electric power to the fireplace if service is to be performed.
2. For a complete shut-down procedure: push in gas control knob slightly and turn clockwise to off. Do not force.
3. For a temporary shut-down procedure: set thermostat to lowest setting or remote switch to off. Press and turn the gas knob clockwise to pilot.

MAINTENANCE

Turn off the gas and electrical power before servicing the fireplace.

CAUTION: Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing. This fireplace and its venting system should be inspected before use and at least annually by a qualified service person. The fireplace area must be kept clear and free of combustible materials, gasoline or other flammable vapours and liquids. The flow of combustion and ventilation air must not be obstructed.

1. In order to properly clean the burner and pilot assembly, remove the logs to expose both assemblies.
2. Keep the control compartment, logs, burner, air shutter opening and the area surrounding the logs clean by vacuuming or brushing, *at least once a year*.

3. Check to see that all burner ports are burning. Clean out any of the ports which may not be burning or are not burning properly.

4. Check to see that the pilot flame is large enough to engulf the thermocouple and thermopile and reaches toward the burner with the third jet.

5. Replace the cleaned logs.

6. Check to see that the main and runner burners ignite completely on all openings when the gas knob for the burners is turned on. A 5 to 10 second total light-up period is satisfactory. If ignition takes longer, consult your Napoleon dealer / distributor.

7. Check that the gasketing on the sides, top and bottom of the door is not broken or missing. Replace if necessary.

ADJUSTMENTS

PILOT BURNER ADJUSTMENT

Adjust the pilot screw to provide properly sized flame. Turn in a clockwise direction to reduce the gas flow.

FIGURE 64

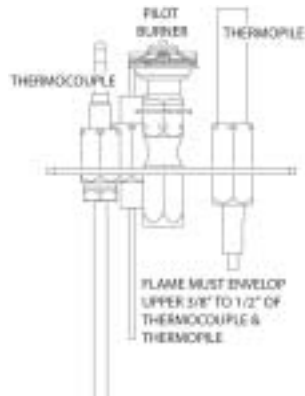


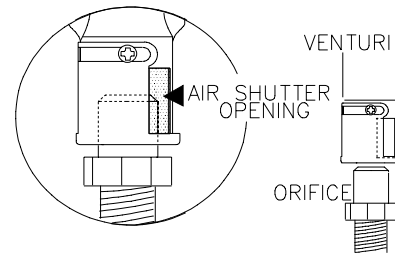
FIGURE 65

WARNING: This is a fast acting thermocouple. It is an integral safety component. Replace only with a fast acting thermocouple supplied by Wolf Steel Ltd.

VENTURI ADJUSTMENT

Natural gas models have air shutters set at 1/4 (.250") inch open. Propane gas models have air shutters set at 7/16 (.437) inch open. Closing the air shutter will cause a more yellow flame, but can lead to carboning. Opening the air shutter will cause a more blue flame, but can cause flame lifting from the burner ports. The flame may not appear yellow immediately; allow 15 to 30 minutes for the final flame colour to be established.

FIGURE 66



AIR SHUTTER ADJUSTMENT MUST ONLY BE DONE BY A QUALIFIED GAS INSTALLER!

RESTRICTING VERTICAL VENTS

Vertical installations may display a very active flame. If this appearance is not desirable, the vent exit must be restricted using the optional restrictor vent kit, RP40-KT. This will reduce

the velocity of the exhaust gases, slowing down the flame pattern and creating a more traditional gentle appearance. Specific instructions are included with the kit.

REPLACEMENTS

Contact your dealer or the factory for questions concerning prices and policies on replacement parts. Normally all parts can be ordered through your Napoleon dealer or distributor.

*** WARNING: This is a fast acting thermocouple. It is an integral safety component. Replace only with a fast acting thermocouple supplied by Wolf Steel Ltd.**

When ordering replacement parts always give the following information:

1. MODEL & SERIAL NUMBER OF FIREPLACE
2. INSTALLATION DATE OF FIREPLACE
3. PART NUMBER
4. DESCRIPTION OF PART
5. FINISH
6. TOP OR REAR VENT

COMPONENTS COMMON TO ALL UNITS

#	PART No.	DESCRIPTION
1*	W361-0016	GLOWING EMBERS
2*	W550-0001	CHARCOAL EMBERS
3	W562-0009	DOOR GASKET (100 INCHES)
4	W010-0454	GLASS W/ GASKET
5*	W500-0028	FIRESTOP - FLEXIBLE VENTING
6*	W385-0245	NAPOLEON LOGO
7*	W573-0008	HIGH TEMP SEALANT
8	GL-634	BGD40 LOGSET
9	W135-0153	LOG#1
10	W135-0154	LOG#2
11	W135-0155	LOG#3 - PIECE A
12	W135-0156	LOG#3 - PIECE B
13	W135-0157	LOG#4
14	W135-0158	LOG#5 - PIECE A
15	W135-0159	LOG#5 - PIECE B
16	W475-0265	END FIBRE BRICK PANEL - FOR WALL
17	W475-0259	END FIBRE BRICK PANEL - FOR BURNER
18	W475-0260	END FIBRE BRICK PANEL - FOR BURNER
19	W475-0261	SIDE FIBRE BRICK PANEL - FOR BURNER
20	W475-0262	SIDE FIBRE BRICK PANEL - FOR BURNER
21	W080-0519	BOTTOM LOUVRE BRACKET
22	W500-0193	BRICK PANEL RETAINER
23	N010-0279	SIDE LOUVRE HOOD w/ LOUVRE BRACKETS

COMPONENTS UNIQUE TO OPEN END UNIT

24	W200-0114	SIDE DOOR COVER
25	N010-0327	SIDE DOOR HEAT SHIELD
26	W300-0057	END DOOR TEMPERED GLASS ONLY
27	W010-0873	END DOOR TEMPERED GLASS c/w GASKET
3	W562-0009	DOOR GASKET (100 INCHES)
28	W475-0263	SIDE BRICK PANEL - FOR WALL
29	N010-0310	END LOUVRE HOOD w/ LOUVRE BRACKETS
30	W500-0192	END BRICK PANEL RETAINER

COMPONENTS UNIQUE TO SEE-THRU UNIT

3	W562-0009	DOOR GASKET (100 INCHES)
16	W475-0265	END FIBRE BRICK PANEL - FOR WALL
31	N010-0326	END DOOR HEAT SHIELD
32	W200-0117	END DOOR COVER
30	W500-0192	END BRICK PANEL RETAINER
33	W010-0516	BLACK SIDE DOOR c/w GLASS

COMPONENTS UNIQUE TO PENINSULA UNIT

28	W010-0873	END DOOR TEMPERED GLASS c/w GASKET
33	W010-0516	BLACK SIDE DOOR c/w GLASS
30	N010-0310	END LOUVRE HOOD w/ LOUVRE BRACKETS

BURNER COMPONENTS

34	W010-0871	REPLACEMENT BURNER
35	W010-0801	NATURAL GAS PILOT ASSEMBLY
35	W010-0800	PROPANE GAS PILOT ASSEMBLY
36	W455-0069	NATURAL GAS PILOT INJECTOR
36	W455-0067	PROPANE GAS PILOT INJECTOR
37*	W660-0005	BURNER ON/OFF SWITCH
38	W680-0004	THERMOPILE
39	W680-0005	THERMOCOUPLE
40	W240-0006	ELECTRODE w/ WIRE
41	W357-0001	PIEZO IGNITER
42	N455-0003	MAIN BURNER ORIFICE - PROPANE
42	W455-0072	MAIN BURNER ORIFICE - NATURAL GAS
43	W725-0026	PROPANE GAS VALVE
43	W725-0025	NATURAL GAS VALVE

VENT KITS

GD420 (5 FOOT)

44*	W010-0772	5" FLEXIBLE ALUMINIUM LINER - (5 FT.) c/w SPACERS
45*	W730-0012	8" FLEXIBLE ALUMINIUM LINER - (5 FT.)

GD430 (10 FOOT)

46*	W730-0013	8" FLEXIBLE ALUMINIUM LINER -(10 FT.)
47*	W010-0773	5" FLEXIBLE ALUMINIUM LINER-(10 FT.) c/w SPACERS
48*	W010-0810	WALL SUPPORT ASSEMBLY

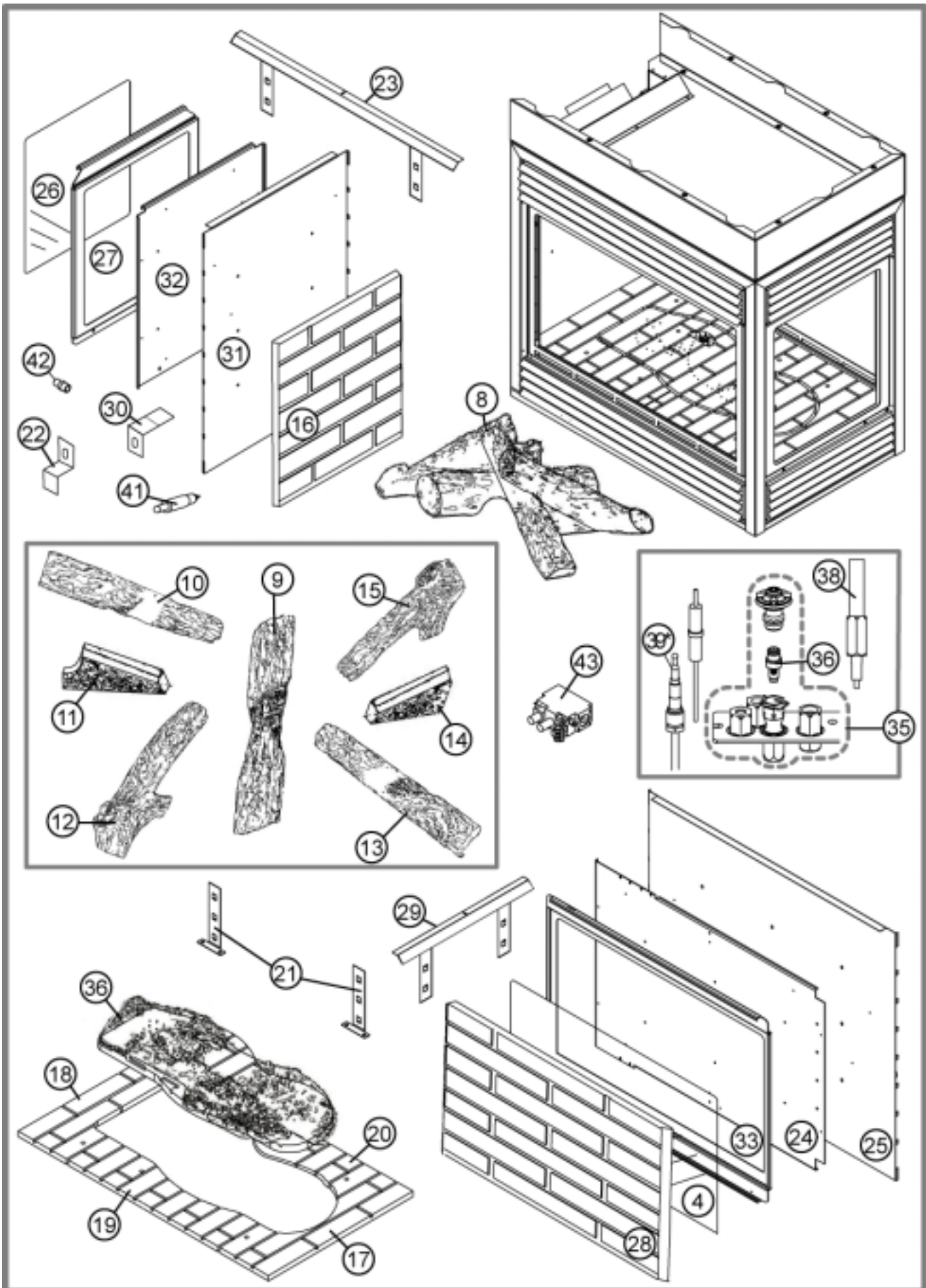
ROOF TERMINAL KITS

49*	1/12 TO 7/12 PITCH	-	GD410
50*	8/12 TO 12/12 PITCH	-	GD411
51*	FLAT ROOF	-	GD412

52*	W120-0036	VERTICAL CAP
53*	W170-0063	STORM COLLAR
54*	W010-0453	ROOF SUPPORT
55*	W263-0054 / W263-0055 / W263-00056	ROOF FLASHING

TERMINAL KITS

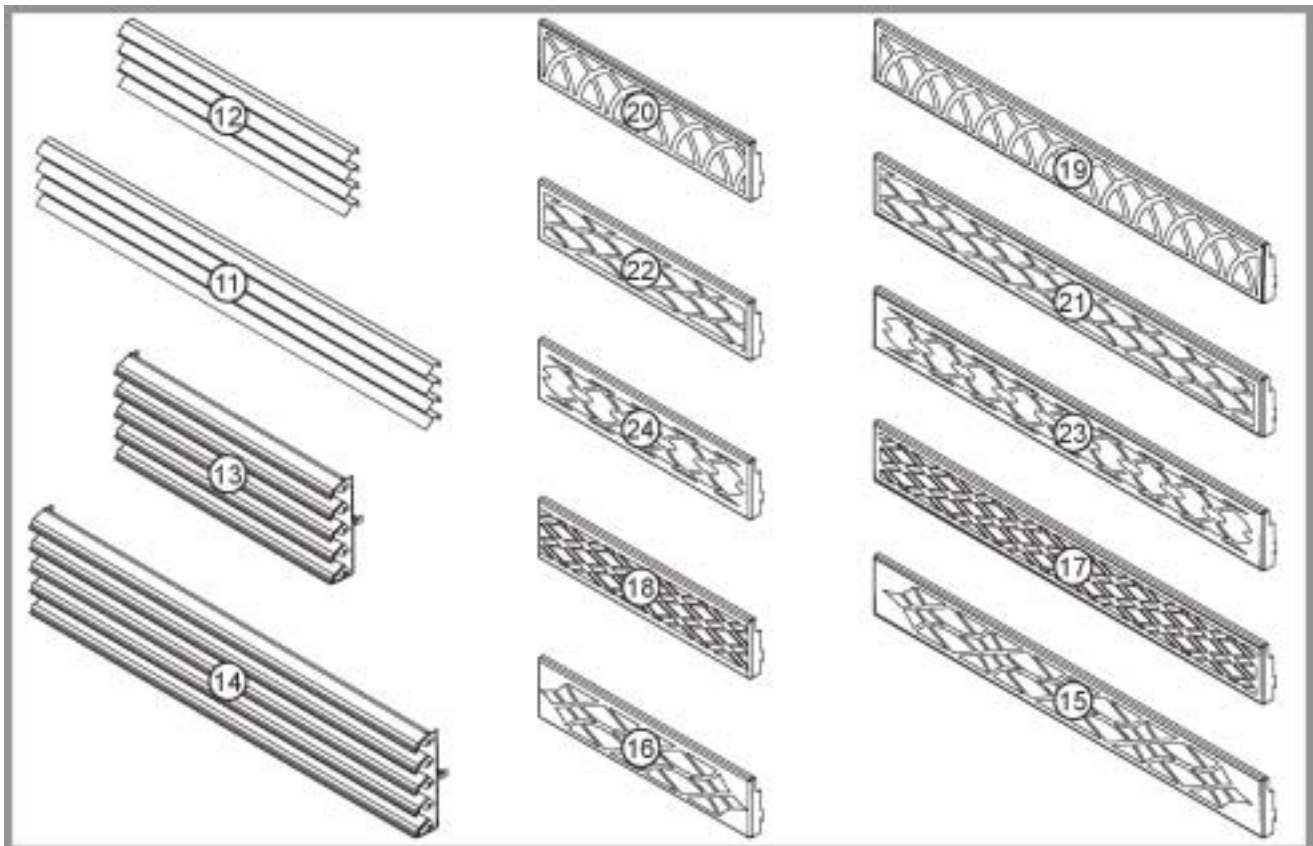
56*	PERISCOPE	-	GD401
57*	WALL TERMINAL KIT	-	GD422



***WARNING:** This is a fast acting thermocouple. It is an integral safety component. Replace only with a fast acting thermocouple supplied by Wolf Steel Ltd.

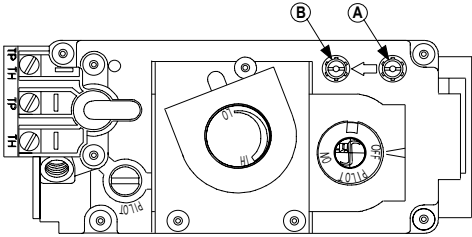
ACCESSORIES

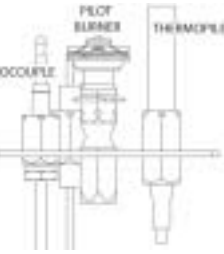
#	PART No.	DESCRIPTION			
1	W690-0001	MILLIVOLT THERMOSTAT	16*	EHOIBG -1	END HERITAGE ORNAMENTAL INSET - BRUSHED GOLD PLATED
2	GD501	HEAT GUARD	17	DOIG-1	DIAMOND ORNAMENTAL INSET - GOLD PLATED
3*	W573-0008	HI-TEMP SEALANT	17	DOIKG-1	DIAMOND ORNAMENTAL INSET - BLACK GOLD PLATED
4*	W010-0370	WALL SUPPORT ASSEMBLY	17	DOIBC-1	DIAMOND ORNAMENTAL INSET - BRUSHED COPPER PLATED
5	GZ-550-1KT	BLOWER KIT	17	DOIBG-1	DIAMOND ORNAMENTAL INSET - BRUSHED GOLD PLATED
6*	W175-0170	DURA-VENT ZERO CLEARANCE ADAPTOR	18*	EDOIG-1	END DIAMOND ORNAMENTAL INSET - GOLD PLATED
7*	W500-0033	VARIABLE SPEED SWITCH WALL MOUNTING PLATE	18*	EDOIKG-1	END DIAMOND ORNAMENTAL INSET - BLACK GOLD PLATED
8*	W660-0010	REMOTE CONTROL - ADVANTAGE	18*	EDOIBC-1	END DIAMOND ORNAMENTAL INSET - BRUSHED COPPER PLATED
8*	W660-0011	REMOTE CONTROL - ADVANTAGE PLUS	18*	EDOIBG-1	END DIAMOND ORNAMENTAL INSET - BRUSHED GOLD PLATED
9*	W660-0013	MODULATING REMOTE - CONTROLS FLAME & BLOWER	19	GOIG-1	GOTHIC ORNAMENTAL INSET - GOLD PLATED
10*	W175-0166	5" COUPLER	19	GOIKG-1	GOTHIC ORNAMENTAL INSET - BLACK GOLD PLATED
10*	W175-0002	8" COUPLER	19	GOIBC-1	GOTHIC ORNAMENTAL INSET - BRUSHED COPPER PLATED
11	GVFLK	LOUVRE KIT - BLACK	19	GOIBG-1	GOTHIC ORNAMENTAL INSET - BRUSHED GOLD PLATED
11	GVFLPB	LOUVRE KIT - POLISHED BRASS	20*	EGOIG-1	END GOTHIC ORNAMENTAL INSET - GOLD PLATED
11	GVFLAB	LOUVRE KIT - ANTIQUE BRASS	20*	EGOIKG-1	END GOTHIC ORNAMENTAL INSET - BLACK GOLD PLATED
11	GVFLSS	LOUVRE KIT - STAINLESS STEEL	20*	EGOIBC-1	END GOTHIC ORNAMENTAL INSET - BRUSHED COPPER PLATED
12*	BGDELK	END LOUVRE KIT - BLACK	20*	EGOIBG-1	END GOTHIC ORNAMENTAL INSET - BRUSHED GOLD PLATED
12*	BGDELPB	END LOUVRE KIT - POLISHED BRASS	21	SOIG-1	SEASHELL ORNAMENTAL INSET - GOLD PLATED
12*	BGDELAB	END LOUVRE KIT - ANTIQUE BRASS	21	SOIKG-1	SEASHELL ORNAMENTAL INSET - BLACK GOLD PLATED
12*	BGDESS	END LOUVRE KIT - STAINLESS STEEL	21	SOIBC-1	SEASHELL ORNAMENTAL INSET - BRUSHED COPPER PLATED
13	L36K	LOUVRE KIT - UPPER & LOWER - BLACK	21	SOIBG-1	SEASHELL ORNAMENTAL INSET - BRUSHED GOLD PLATED
13	L36AB	LOUVRE KIT - UPPER & LOWER - ANTIQUE BRASS	22*	ESOIG-1	END SEASHELL ORNAMENTAL INSET - GOLD PLATED
13	L36PB	LOUVRE KIT - UPPER & LOWER - POLISHED BRASS	22*	ESOIKG-1	END SEASHELL ORNAMENTAL INSET - BLACK GOLD PLATED
13	L36SS	LOUVRE KIT - UPPER & LOWER - BRUSHED STAINLESS STEEL	22*	ESOIBC-1	END SEASHELL ORNAMENTAL INSET - BRUSHED COPPER PLATED
14*	ELB40K	END LOUVRE KIT - BLACK	22*	ESOIBG-1	END SEASHELL ORNAMENTAL INSET - BRUSHED GOLD PLATED
14*	ELB40PB	END LOUVRE KIT - POLISHED BRASS	23	EOIG-1	ECLIPSE ORNAMENTAL INSET - GOLD PLATED
14*	ELB40AB	END LOUVRE KIT - ANTIQUE BRASS	23	EOIKG-1	ECLIPSE ORNAMENTAL INSET - BLACK GOLD PLATED
14*	ELB40SS	END LOUVRE KIT - STAINLESS STEEL	23	EOIBC-1	ECLIPSE ORNAMENTAL INSET - BRUSHED COPPER PLATED
15	HOIG-1	HERITAGE ORNAMENTAL INSET-GOLD PLATED	23	EOIBG-1	ECLIPSE ORNAMENTAL INSET - BRUSHED GOLD PLATED
15	HOIKG-1	HERITAGE ORNAMENTAL INSET-BLACK GOLD PLATED	24*	EEOIG-1	END ECLIPSE ORNAMENTAL INSET - GOLD PLATED
15	HOIBC-1	HERITAGE ORNAMENTAL INSET-BRUSHED COPPER PLATED	24*	EEOIKG-1	END ECLIPSE ORNAMENTAL INSET - BRUSHED COPPER PLATED
15	HOIBG-1	HERITAGE ORNAMENTAL INSET-BRUSHED GOLD PLATED	24*	EEOIBC-1	END ECLIPSE ORNAMENTAL INSET - BRUSHED GOLD PLATED
16*	EHOIG -1	END HERITAGE ORNAMENTAL INSET-GOLD PLATED	24*	EEOIBG-1	END ECLIPSE ORNAMENTAL INSET - BRUSHED GOLD PLATED
16*	EHOIKG-1	END HERITAGE ORNAMENTAL INSET-BLACK GOLD PLATED	32*	GD825N	VALVE REGULATOR FOR W660-0013 - NATURAL GAS
16*	EHOIBC-1	END HERITAGE ORNAMENTAL INSET -BRUSHED COPPER PLATED	33*	GD825P	VALVE REGULATOR FOR W660-0013 - PROPANE
			41*	RP40-KT	RESTRICTOR VENT KIT
			42*	W175-0205	CONVERSION KIT - NG - LP
			42*	W175-0206	CONVERSION KIT - LP - NG



TROUBLE SHOOTING GUIDE

BEFORE ATTEMPTING TO TROUBLESHOOT, PURGE YOUR UNIT AND INITIALLY LIGHT THE PILOT AND THE MAIN BURNER WITH THE GLASS DOOR OPEN.

SYMPTOM	PROBLEM	TEST SOLUTION
Main burner flame is a blue, lazy, transparent flame.	Blockage in vent.	- remove blockage. In really cold conditions, ice buildup may occur on the terminal and should be removed as required.
	Incorrect installation.	- refer to Figure 34 to ensure correct location of storm collars. (vertical vent)
Flames are consistently too large or too small. Carboning occurs.	Unit is over-fired or under-fired.	- check pressure readings: Inlet pressure can be checked by turning screw (A) counter-clockwise 2 or 3 turns and then placing pressure gauge tubing over the test point. Gauge should read 8" (minimum 4.5") water column for natural gas or 13" (11" minimum) water column for propane. Check that main burner is operating on "HI". Outlet pressure can be checked the same as above using screw (B). Gauge should read 3.5" water column for natural gas or 10" water column for propane. Check that main burner is operating on "HI". AFTER TAKING PRESSURE READINGS, BE SURE TO TURN SCREWS CLOCKWISE FIRMLY TO RESEAL. DO NOT OVERTORQUE. Leak test with a soap and water solution.
		
Carbon is being deposited on glass, logs or combustion chamber surfaces.	Air shutter has become blocked	- ensure air shutter opening is free of lint or other obstructions.
	Flame is impinging on the logs or combustion chamber.	- check that the logs are correctly positioned. - open air shutter to increase the primary air. - check the input rate: check the manifold pressure and orifice size as specified by the rating plate values. - check that the door gasketing is not broken or missing and that the seal is tight. - check that both 5" and 8" vent liners are free of holes and well sealed at all joints. - check that minimum rise per foot has been adhered to for any horizontal venting.
White / grey film forms.	Sulphur from fuel is being deposited on glass, logs or combustion chamber surfaces.	- clean the glass with a recommended gas fireplace glass cleaner. Do not clean glass when hot! If deposits are not cleaned off regularly, the glass may become permanently marked.
Exhaust fumes smelled in room, headaches.	Fireplace is spilling.	- check door seal and relief flap seal. - check for chimney blockage - check that chimney is installed to building code. - room is in negative pressure; increase fresh air supply.
Pilot goes out when the gas knob is released. The gas valve has an interlock device which will not allow the pilot burner to be lit until the thermocouple has cooled. Allow approximately 60 seconds for the thermocouple to cool.	System is not correctly purged.	- purge the gas line with a glass door open.
	Out of propane gas.	- fill the tank.
	Pilot flame is not large enough	- turn up the pilot flame.
	Pilot flame is not engulfing the thermocouple.	- gently twist the pilot head to improve the flame pattern around the thermocouple.
	Thermocouple shorting / faulty.	- loosen and tighten thermocouple. - clean thermocouple and valve connection. - replace thermocouple. - replace valve.
	Faulty valve.	- replace.

SYMPTOM	PROBLEM	TEST SOLUTION
Pilot burning; no gas to main burner; gas knob is on 'HI'; wall switch / thermostat is on.	Thermostat or switch is defective.	- connect a jumper wire across the wall switch terminals; if main burner lights, replace switch / thermostat.
	Wall switch wiring is defective.	- disconnect the switch wires from the valve & connect a jumper wire across terminals 1 & 3; if the main burner lights, check the wires for defects and / or replace wires.
	Main burner orifice is plugged.	- remove stoppage in orifice.
	Faulty valve.	- replace.
Pilot goes out while standing; Main burner is in 'OFF' position.	Gas piping is undersized.	- turn on all gas appliances and see if pilot flame flutters, diminishes or extinguishes, especially when main burner ignites. Monitor appliance supply working pressure. - check if supply piping size is to code. Correct all undersized piping.
	Pilot will not light.	No spark at pilot burner <ul style="list-style-type: none"> - check if pilot can be lit by a match - check that the wire is connected to the push button ignitor. - check if the push button ignitor needs tightening. - replace the wire if the wire insulation is broken or frayed. - replace the electrode if the ceramic insulator is cracked or broken. - replace the push button ignitor.
	Out of propane gas	- fill the tank.
	Spark gap is incorrect	- spark gap should be 0.150" to 0.175" (5/32" to 11/65" approx.) from the electrode tip and the pilot burner. To ensure proper electrode location, tighten securing nut (finger tight plus 1/4 turn).
	No gas at the pilot burner	- check that the manual valve is turned on. - check the pilot orifice for blockage. - replace the valve. - call the gas distributor.
Main burner goes out; pilot stays on.	Pilot flame is not large enough or not engulfing the thermopile	- turn up pilot flame. - replace pilot assembly.
	Thermopile shorting	- clean thermopile connection to the valve. Reconnect. - replace thermopile / valve.
	Remote wall switch wire is too long; too much resistance in the system.	- shorten wire to correct length or wire gauge.
	Faulty thermostat or switch.	- replace.
Main burner goes out; pilot goes out.	Refer to " MAIN BURNER GOES OUT; PILOT STAYS ON "	
	Vent is blocked	- check for vent blockage.
	Vent is re-circulating	- check joint seals and installation.
Remote wall switch is in "OFF" position; main burner comes on when gas knob is turned to "ON" position.	5" flexible vent has become disconnected from fireplace.	- re-attach to fireplace.
	Wall switch is mounted upside down	- reverse.
	Remote wall switch is grounding.	- replace.
	Remote wall switch wire is grounding.	- check for ground (short); repair ground or replace wire.
Flames are very aggressive.	Faulty valve.	- replace.
	Door is ajar	-tighten door clamps
	Venting action is too great.	-restrict vent exit with restrictor vent kit, RP40-KT.

